Feminist Futures Helsinki Hackathon:

Transdisciplinary co-creation of socially engaged projects

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Creative Sustainability
Transdisciplinary master's thesis between the departments of Design (School of Arts, Design and Architecture)and Built Environment (School of Engineering)

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Aalto University.

Helsinki, September 27, 2021.

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Title of thesis Feminist Futures Helsinki Hackathon: Transdisciplinary co-creation of socially engaged projects

Degree (1) Master of Arts (Design) & (2) Master of Science (Built Environment)

Degree programme (1) Creative Sustainability in Design (ARTS215) & (2) Creative Sustainability in Real Estate and Water Management (ENG3079)

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Year of approval 2021 (Submission 27.09.21)

Number of pages 185

Language English

Abstract

This transdisciplinary thesis exhibits the potentials found in the intersection between (1) feminism(s), (2) real estate, land use and urban planning, (3) participatory design approaches, and (4) hackathons. In addition, the thesis documents the organisation and execution of a feminist hackathon organised in May 2021 in Helsinki, Finland.

The study consists of a literature review of the four main topics mentioned above, exploring overlaps and contradictions to understand the potential of the union. In addition, a thorough recount and analysis is made of the Feminist Futures Helsinki hackathon (FFH), reflecting on its organisation (before), its unfolding (during) and its impact (after). The study draws from methods from PAR and ethnography such as semi-structured interviews, surveys, ethnographic observations, diagram sketching and case studies. Furthermore, the analysis offers in-depth insights from four of the 12 projects that resulted from the hackathon. Namely, the cases cover topics of inclusion in participatory planning in Helsinki and Lapinlahti, Sámi allyship and age-inclusive participatory communities.

The thesis offers insights into a reflexive journey, where the co-authors explore their own positionality and power within the structures created for the hackathon.

Key takeaways from this work in the context of organising feminist hackathons include: (1) it matters who sets the agenda, (2) it matters who participates, (3) it matters who benefits, (4) processes matter as much as outcomes, and (5) accountability matters.

The co-authors argue for the potential of feminist hackathons to shift public discourse by bringing attention to topics and issues that are otherwise ignored; to encourage educational institutions like universities to rethink partnerships with community organisations; to challenge tech-solutionism. In addition, by centring intersectional feminist values such as accessibility and pursuit of justice, organisers of feminist hackathons will enable more diverse participation.

***Keywords*:** feminism, hackathons, participatory methods, urban planning, real estate, power, equity, futures, sustainability, design justice

Acknowledgements

The saying "it takes a village" has never been more true to us. We have so many people to thank for their contribution to this thesis, that we will most likely forget someone, and for that we apologise in advance.

To Nitin Sawhney, our number one supporter, for always believing in us, more than we believe in ourselves, for teaching us that the sky's the limit, and for always leading by example by creating opportunities for the people around you.

To Eeva Berglund, for inspiring us to push the boundaries of academia, and for your many years of inspiring work in feminism. We wish we could have just a small piece of your brilliant mind.

To Saija Toivonen, for guiding us in the challenging task of bridging disciplines, for inspiring us in expanding the limits and audiences of our work, and for being so invested in imagining better futures for the built environment field.

To Mikko Jalas, Naoko Nakagawa and Suvi Jämsä, for all your time and work to support the extra administrative steps that a joint master thesis involves.

To our FFH team: Helmi, Eve, Kaisla, Karolina, Uttishta, Amel, and Anna. Without you, we could not have done this.

To all our partners, collaborators, and helpers along the way, for believing in our crazy idea, and trusting us with your time and your passion. We will forever be grateful that you were part of this.

To all the participants in FFH, for bringing your passion, your knowledge, and your personalities to the hackathon. We are humbled by your contributions.

To Ville and Lapinlahden Lähde for letting us use your beautiful facilities during the hackathon.

To the many proofreaders who offered their opinion and helped us communicate as clearly as possible: Daiming, Kimberley, Karolina, Louise, Ásta, and Claudia.

A special thanks to Alexis Hope, Catherine D'Ignazio and the whole team behind the Make the Breast Pump Not Suck Collective. Without your brilliant work, your enthusiasm and your support, we would have never even dreamed of doing something like this.

To our friends and family, for your encouragement and your love.

Glossary of Terminology

Cis. Short for cisgender. See Cisgender.
Cisgender. Someone whose gender identity is consistent with the sex they were assigned at birth. Also shortened to cis, as in cis man, cis woman.
Data feminism. A way of thinking about data that's informed by direct experience, commitment to action, and intersectional feminist thought (D'Ignazio & Klein, 2020).
Ethnicity/Race. We acknowledge that there are different perceptions of these two words across Europe and in the United States (where a lot of our literature comes from), and both may be triggering to different people. The different perceptions are due to the historic influence of the words on each continent. We will be using both terms throughout the thesis, sometimes interchangeably.

Feminism (our definition). Political, social and economic equality of all people.

FFH Community. Organisers, participants, and partners of the Feminist Futures Helsinki hackathon.

HCD. Human-Centered Design.

HCI. Human-Computer Interaction.
Intersectionality. Intersectionality, a term coined by feminist legal scholar Kimberlé Crenshaw, refers to the ways that structural oppression is based on the intersection multiple elements of an identity such as race, gender identity, sexual orientation, class, immigration status, disability, age, and other axes of identity.

LGBTQI+. Lesbian, gay, bisexual, trans*, queer, intersex.

Matrix of domination. A sociological paradigm that explains issues of oppression that deal with race, class, and gender, which, though recognized as different social classifications, are all interconnected.
Minoritised groups >< Dominant groups. While the term 'minority' describes a social group that is comprised of fewer people, 'minoritised' indicates that a social group is actively devalued and oppressed by a dominant group, one that holds more economic, social and political power (D'Ignazio & Klein, 2020).

MIT. Massachusetts Institute of Technology.

PAR. Participatory Action Research.

Patriarchy. The system of institutionalised sexism.

PD. Participatory Design.
Situated knowledge. The idea that all forms of knowledge reflect the particular conditions in which they are produced, and at some level reflect the social identities and social locations of knowledge producers.

TDR. Transdisciplinary research.
Trans*. This thesis uses trans* to broadly include people whose gender identity differs from the gender they were assigned at birth. Trans* may include (among other identities and communities) transgender, transfeminine, transmasculine, MTF (male-to-female), FTM (female-to-male), genderqueer, gender-non-conforming, gender-variant and third gender/sex, transsexual, two-spirit, and transvestite/cross-dresser (Costanza-Chock, 2020).

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** (HF) is written by Henriette Friis, (ED) is written by Eva Duran Sánchez, and (joint) is co-written by both authors*

Chapter 1

Introduction

1. Introduction

We live in a time, and a world where engaging or disengaging with social reality is a choice only the privileged get to make. We have access to more information than ever before from all over the world, faster than we have ever had before. Nevertheless, the people with the most power to positively impact the challenges the global community faces often choose not to — because it means sacrificing something of their own.

"Indifference to social reality is a powerful force that is perhaps even more dangerous than malicious intent"

Ruha Benjamin (Othering and Belonging Institute, 2019)

This spring, we wanted to create a platform grounded in what Ruha Benjamin calls "a different social reality" (Othering and Belonging Institute, 2019) — a social reality grounded in justice and joy.

This thesis is the documentation of our efforts to put feminist values at the heart of every step in the creation of the hackathon we organised in May 2021 in Helsinki, Finland. We believe the insights from this work will add value to a growing literature around intersectional feminist hackathons/co-creation events.

We draw inspiration from intersectional social-justice-oriented movements such as Black feminism, Disability justice and rights activism, data feminism, decoloniality, equity in technology, and the design justice movement.

Through our studies in the Creative Sustainability program, and specifically through our specialisation within social and political sustainability, we have seen countless examples of wicked and systemic problems and just as many attempts at solving sustainability issues through different forms of innovation. However, the reproduction of human bias is often not addressed adequately, resulting in well-intentioned innovations that fail to account for the complexities of the socio-political systems within which these sustainability challenges arise and reside. Moreover, innovation environments are too often homogenous — something we will explain further in section 3.4. This thesis explores what is possible when the hackathon framework is adapted to the values of feminism and the concepts from participatory methods.

While hackathons today often focus on creating disruptive and scalable start-ups, technologies, and innovation interventions ready to be implemented, there is often not enough critical examination of some fundamental questions: Like how are the hackathons being organised? Who is organising them — and who is participating? Who benefits? And who is left behind?

This thesis offers an example of a union between feminist values and the hackathon format, suggests approaches to more equitable co-creation processes, and proposes questions for further consideration. However, we reject the idea that there is one superior way of doing this and one possible future that works equally for everyone. Instead, we move through this work shifting between critical and generative modes of thought to make the argument for a pluralistic approach to transdisciplinary co-creation of socially engaged projects.

1.1 Feminist Futures Helsinki Hackathon (briefly explained)

The Feminist Futures Helsinki (FFH) hackathon is an online hackathon that took place May 15-31, 2021. It was organised as a sister hackathon to Our Feminist Futures, which took place online in May 2021 for participants in the United States and was organised by a collective at the Massachusetts Institute of Technology (MIT). The FFH hackathon, its origins, the events that unfolded and the impact of the hackathon will be explained in great detail in chapter

four. However, this brief introduction gives a surface-level understanding, as we will be referring to the FFH hackathon throughout the literature review.

The FFH hackathon saw 50 participants and more than 20 partners and mentors, primarily based in Finland, come together to imagine feminist futures for Finnish society within four thematic tracks: Urban Futures, Inclusive Futures, Eco-Justice Futures, and Well-Being Futures. There were 12 projects in total that prompted participants and partners to collectively imagine intersectional feminist futures on topics such as Sámi allyship, surrogacy, eco-justice, countering online violence, feminist and anti-racist internet, immigration processes, loneliness prevention in cities for youth, the sustainment of Lapinlahden Lähde as a space for the public, feminist urban planning, and more.

The hackathon lasted 2.5 weeks and ended with a public online showcase of the projects that emerged. The two co-authors of this thesis led the organisation of the hackathon, and the thesis will serve as our way of reflecting on the learnings we gained through the process.

The literature review presented in chapter three will serve as the background and justification for the themes, approaches and values that formed the foundation for the FFH hackathon.

1.2 Aims of the Research

The general aim of the thesis is to increase the understanding of the potentials of applying feminist values and principles in so-called "innovation spaces". The thesis will offer theoretical inquiry and grounded research through a pilot hackathon initiative led by the co-authors while posing crucial questions and critiques of hackathons as participatory practices.

Feminism, innovation, and civic participation have all been studied in great detail. However, the literature that explores the intersection of the three is still in its early stages, and most of the available studies were completed/conducted in the United States. Nevertheless, we were both aware of Helsinki's thriving hackathon scene and its familiarity within university circles, so we thought organising a feminist hackathon would be an interesting way to apply the literature in the Finnish context. Throughout this work, we refer to feminism as the political, social and economic equality of all people; and we understand innovation not only as a novelty but as giving attention and resources to tackle a particular situation related to a specific community.

In recent years, we have seen a substantial increase in the public interest for sustainability, but this interest has mainly focused on the climate crisis and ecological breakdown. We want to make the case that for communities, companies, and institutions to design genuinely sustainable futures, those futures must be equitable and include considerations about social and political sustainability. The processes we explore in this thesis have the potential to support this.

Another aim for the thesis is to research how our academic fields, design and the built environment relate to feminism, participatory methods, and innovation events. We will reflect on how our design choices affected what happened during the FFH hackathon and see what insights emerge when the setting is designed to support civic participation.

1.3 Audience

We write this thesis first and foremost to share our learnings with the community of researchers and practitioners who are contributing to and learning from the literature around feminist hackerspaces, such as hackathons, and other participatory processes like participatory urban planning and participatory design.

We hope this will benefit those who wish to challenge the narratives around inclusion and participation and recognise the need to go beyond surface-level initiatives to get at the core of equitable collaboration. We imagine that people who are curious about governance examples in transdisciplinary and socially engaged practices will also find this research helpful. In addition, we believe this work will add to the growing knowledge base around approaches to challenge tech-solutionism.

Ultimately, we see all members of the Aalto University community as potential audiences, as this thesis is a pilot project in transdisciplinary thesis collaboration. We believe in the value of bringing multiple voices together and wish to show the benefit of this through the hackathon itself and the academic research it has produced.

Engaging with a small selection of the 12 multidisciplinary projects that emerged through the hackathon, this thesis will offer a distinct analysis of these concerns in themes critical for sustainability and related to equity, inclusion, urban planning, and environmental justice. Therefore, we also believe practitioners in these fields to be potential audiences.

1.4 Research Questions

This thesis will explore the following research questions that are divided into two main research questions and two sub-questions

(1) How might hackathons be designed with feminist values and principles at the core to facilitate creative forms of participation for socially engaged design practices?
(1.1) What are the benefits and challenges of applying feminist values and practices in hackathons?

(2) What are the benefits, and who are the beneficiaries, of bringing together multidisciplinary teams to work on projects proposed by community organisations?
(2.1) How might the emerging insights from this work serve as a bridge between intersectional feminism, real estate, urban planning, participatory design approaches, and the Finnish hackathon scene?

The research questions in this thesis are based on concepts of feminism(s), socially engaged practices, participatory design, and the culture and politics of hackathons. In order to answer them, we will first explore the theoretical foundations of feminism(s), real estate, urban planning, participatory design approaches, and hackathons. Next, we will examine the empirical findings from organising the FFH hackathon. Finally, we will combine data from the literature review and the FFH hackathon to answer the research questions.

1.5 Structure of the Thesis & Study Design

This thesis will take you on a journey through theory and applied practice. We will build on existing literature through grounded research of a pilot hackathon initiative (Feminist Futures Helsinki hackathon), and we will highlight four projects from the hackathon and reflect on the future potential of the research.

The **Approach** chapter will offer insights into the lenses, methodology, methods, and ethical considerations that have shaped the framework for this work.

The **Background** chapter presents a literature review of the four main topics of this thesis: (1) Feminism(s), (2) Real Estate, Land Use & Urban Planning, (3) Designing (for) Participation, and (4) The Culture and Politics of Hackathons.

First, the **Feminism(s)** subchapter will present different intersectional notions on feminism(s) that draw on Black feminism, Disability justice and rights activism, data feminism, decoloniality, equity in technology, and the design justice movement. It will introduce different ways to frame social power imbalances by introducing concepts such as the matrix of domination (Collins, 2000) and intersectionality (Crenshaw, 1989). It will also offer feminist perspectives on knowledge-making and academia (Collins, 1989; D'Ignazio et al., 2020; Haraway, 1988), data science (D'Ignazio & Klein, 2020), processes of consciousness-raising for emancipation (hooks, 2015) and co-liberation (Costanza-Chock, 2020; D'Ignazio & Klein, 2020). Understanding the challenges that prevent feminism from being truly intersectional help us understand the struggles that other sectors (like real estate or participatory design) might be facing to achieve equality. The chapter will conclude by exploring feminism in the context of Finland and how its perceived fairness poses a challenge to advancing equity.

Second, the **Real Estate, Land Use & Urban Planning** subchapter will present different perspectives on values, practices, and partnerships in the commercial and public real estate field. First, it will describe how value is understood and measured in the commercial investment real estate sector (Geltner & Miller, 2001). Then, it will illustrate the relationship between the sectors' incentives for value and global challenges (UN General Assembly, 2017; World Economic Forum, 2021). Next, it will explore traditional values in public real estate and compare them with current neoliberal trends of public land privatisation (Hyötyläinen & Haila, 2018). After that, it will explain the key barriers to achieving social sustainability in land use planning (Rashidfarokhi et al., 2018) and will explore how situated feminist perspectives affect the built environment. These include an overview of whom cities are designed for (Berglund, 2007; Criado-Perez, 2019; Greed, 2005; Vaattovaara et al., 2021), land use in Finland and Indigenous critiques (Laiti, 2021), participatory methods in urban planning (Ortiz Escalante & Gutiérrez Valdivia, 2015), and perspectives on academia and future-thinking methods in real estate (Toivonen et al., 2021).

Thirdly, the **Designing (for) Participation** subchapter will introduce participatory design practices. Namely, it speaks about the origin of Participatory Design in Scandinavia (Asaro, 2014; Costanza-Chock, 2020; Ehn, 2008; Sawhney & Tran, 2020) and the role of designers as facilitators (Costanza-Chock, 2020; Light & Akama, 2012; Sibbet, 2002). It will then highlight critiques of participatory design (Asaro, 2014; Bannon et al., 2019; Costanza-Chock, 2020; Lykes & Hershberg, 2012) and explore similarities, differences and opportunities in combination with feminist thinking (Bardzell, 2018; brown, 2020; Lykes & Hershberg, 2012) and design justice (Costanza-Chock, 2020).

Finally, the **Culture and Politics of Hackathons** subchapter will define hackathons as innovation events and will expose some of the critiques that the traditional hackathon model has received, such as encouraging tech-solutionism and promoting a culture of exclusion and alienation (Costanza-Chock, 2020; Gregg, 2015; Hope et al., 2019). It will then explore possibilities to respond to such critiques through rethinking hackathon models and practices from feminist and equitable perspectives (Costanza-Chock, 2020; D'Ignazio, 2019; Toupin, 2014). To conclude, it will compare the previously introduced topics to the hackathon scene in Finland.

The Background chapter forms the basis on which we build in the following chapters.

The **Case** chapter is a systematic recount of the before, during, and after of the FFH hackathon.

This chapter introduces the design principles that guided the process and features reflections from participants and partners alike. In addition, four hackathon projects are highlighted.

- **Section 4.1** introduces the premise of the hackathon, our team, the partner and participant profiles, and the 12 projects that resulted from the hackathon.
- **Section 4.2** outlines the organising process through the account of the 11 design principles that we established and used to guide our decision-making. These principles, we believe, have been fundamental to the format and impact of the hackathon.
- **Section 4.3** describes the activities and events that took place during the hackathon, such as the public programme, meditation, mentoring, the halfway feedback form, and the joint sessions. In addition, we also introduce the toolkits that we provided for the participants.
- **Section 4.4** outlines the perceptions of the hackathon as described by participants and partners alike in interviews and surveys.
- Finally, **section 4.5** dives into four selected participant project cases from the hackathon to offer a closer look at the work that emerged from the hackathon. These cases also serve the purpose of showing the breadth of topics that this hackathon format can be applied to. The projects are (1) Cities built for the people, (2) Inclusive Lapinlahti, (3) Strengthening Sámi allyship, (4) Enabling age-inclusive participatory communities".

The **Discussion** explores the ten main themes that emerged from the research and offers opportunities for further discussion beyond this thesis. These are (1) Terminology and feminist buzzwords, (2) Notion on the value in real estate and the opportunity of multidisciplinarity, (3) Reflections on social sustainability in land use planning, (4) The thematic scope of the hackathon, (5) Establishing partnerships, (6) Participant experiences, (7) Low-tech and no-tech solutions, (8) Ideology vs reality, (9) Time and money, (10) MIT & Aalto, (11) Preaching to the choir, and (12) Accessibility of online events.

The **Conclusion** summarises the findings and answers the research questions. Challenges and potentials are reflected on, and the implications of feminist frameworks in hackathons are described.

Finally, the co-authors offer a brief **self-audit** of the references and sources used in this thesis. In order to live up to our values around transparency and positionality, we believe it essential to make clear whose knowledge we have been building on.

Due to the limited scope of the thesis, we note the following:

- We will not be providing in-depth background explanations of all partners; however, they can be found on feministfutureshelsinki.org/partners;
- We will showcase, but not go into detail about the visual design decisions and social media strategy of the hackathon;
- Apart from a brief introduction in section 1.4, we will not talk about all the projects from the FFH hackathon.

1.6 Research Contribution

A thesis often aims at addressing a "gap" in a particular field of research. In our case, rather than a research "gap", this thesis aims to contribute to an emerging narrative of how participatory research for socially engaged projects could be conducted through the format of a hackathon.

The main contributions of this thesis are threefold; theoretical, practical, and methodological.

The **theoretical** contributions come especially through chapter three: the literature review. We create and highlight connections between fields that are not commonly connected in academia. In addition, with our research, we contribute to the literature about hackathons as research methods in the geographical context of Finland, which offers very different circumstances, challenges, and benefits than the United States, for example in the level of inequality, the trust in government, and the colonial history of the countries. This will be exposed further in the following chapters. There has not been a similar experiment conducted in Finland before. In addition to the literature review, the theoretical contributions are noticeable in the diagrams created.

The **practical** contributions come through the pilot hackathon. While the literature review serves an essential role in providing justifications for our actions through their relations to history, theory and methodology, we believe there is significant value in the concrete examples from the FFH hackathon. This is particularly highlighted through the 11 design principles presented in section 4.2.1.

Finally, the **methodological** contributions become apparent through the four highlighted case studies from FFH. The 12 team projects in the hackathon took feminist theories and methodologies and applied them to a diverse set of topics such as land-use planning, reproductive health, mental health, Indigenous activism, and the climate crisis, proving the wide-ranging applicability of the format. In addition, the four highlighted project cases illustrate the result of the 11 design principles on an individual project level.

As such, feminism is applied to multiple layers of this work: from organisation to projects and outcomes. The insights gained from organising the hackathon and the specific insights from each of the 12 hackathon projects serve a deeply meaningful purpose when it comes to adding to the body of knowledge around feminist hackathons and the future of co-creation events.

This thesis explores several levels of abstraction, from the practical elements of organising to the vocabulary used to describe actions and intentions. We hope this will encourage others to lead with intention and care and to review and challenge their professional practices.

Contribution to Real Estate

First, this thesis contributes to understanding how feminist approaches to the built environment can help practitioners in the real estate and urban environments handle challenges better.

Second, for the real estate field, this thesis will provide insights on how hackathons designed with feminist principles can help tackle the problems that the sector is facing due to its narrow visions of value as something purely commercial. This work contributes to an emerging discussion on how participatory research projects can enhance sustainability in different fields within the built environment. With our

empirical study of the FFH hackathon, this thesis gives concrete examples of how a feminist ethos combined with participatory methods can enhance outcomes that challenge tech solutionism and encourage community participation.

Third, given the need for transdisciplinarity and futures-thinking approaches to the real estate field, the detailed analysis of the FFH hackathon design and organisation will help practitioners in the field organise participatory activities that centre on equity. Ideally, they can learn from both our successes and challenges.

Contribution to Design
This thesis offers valuable insights into hackathons as participatory design methodology. The 11 design principles that we developed (presented in section 4.2.1) serve as guidelines for further development of the format of feminist hackathons. In addition, the process of organising, facilitating and interviewing all include elements of participatory design methods.

By analysing and reflecting on power structures within the design discipline, we argue that there is a greater potential for designers also to challenge power structures that exist beyond the discipline.

Contribution to Aalto University
As a meta-contribution, we believe this work serves a significant purpose within our academic institution, Aalto University. We write this thesis as masters students in a multidisciplinary programme (Creative Sustainability) which for more than 11 years now has brought together students from the fields of design, business, engineering, real estate, and architecture. Despite the collaborative nature of the programme and Aalto as a whole, there seems to be a gap between values and action when it comes to the final step between the university and professional life: the master's thesis. As designer, educator, and researcher Annelys de Vet puts it in an interview for the magazine Deem Journal: "Open-source knowledge sharing, collaboration, and choosing to support rather than compete with each other are very important, too, and education is where these attitudes are being shaped" (de Vet, 2021). However, she adds, "A problem with institutional education environments is that while we all talk about collectivity and community, people graduate individually and receive an individual diploma and an individual assessment. Our students' behaviour often mirrors that when they move from a collaborative position to work towards finishing school with a very individual project or statement. We need to reorganise education if we want to set up functional platforms for collectivity and community" (ibid). With this in mind, we urge the university to rethink the structures set up for thesis work to allow for more transdisciplinary, socially engaged work to occur. We hope that this thesis will be the first step in allowing more students to challenge the rigid structure and offer new models for academic work.

1.7 Contribution Statement

This thesis is co-written between Henriette Friis (MA Creative Sustainability) and Eva Duran Sánchez (MSc Creative Sustainability). It is the first master's thesis in Aalto University co-written between students of the School of Arts and School of Engineering. On a practical level, this has meant that we have had to figure out the optimal way to complete this thesis in collaboration with staff/faculty members from each school. This process has been both challenging and deeply rewarding, and we are proud to be piloting this format in Aalto since we deeply believe in the value of transdisciplinary work. Furthermore, the nature of our work in this project has offered an ideal opportunity to demonstrate new ways of collaborating across disciplines.

This thesis is based on the equal partnership in organising the Feminist Futures Helsinki hackathon in May 2021. Most meetings with partners before and during the hackathon and all interviews following the hackathon were conducted together. In addition, we were present in mentoring sessions with the teams during the hackathon, sometimes together and at other times individually. Therefore, certain sections of this thesis will be written by individual authors to ensure compliance with the official requirements of the departments of Design and of the Built Environment. However, the majority of the thesis will be co-written to benefit in full from the practice and values of multidisciplinary work. We will shortly go into the pros and cons of this collaboration, but first, we would like to position our individual backgrounds and journeys into the research.

1.8 Our Positionality: Motivations Behind the Research

According to feminist standpoint theory, all knowledge is situated in a specific embodied experience (D'Ignazio & Klein, 2020; Haraway, 1988; Harding, 2004; and more). Therefore, it is essential that we, the authors of this thesis, Henriette and Eva, acknowledge and express what that embodied experience has been for us.

While most of this thesis is co-written, and we will speak from our shared experience of organising the hackathon, we are still two people with different backgrounds, skills, and privileges. For you, the reader, to understand the standpoint(s) from which we are approaching this research, we would like to introduce ourselves:

1.8.1 Henriette

My journey into this topic started with my discovery of *Data Feminism*. First with the book *Invisible Women* by Caroline Criado-Perez (2019) and later with *Data Feminism* by Catherine D'Ignazio and Lauren F. Klein (2020). These two crucial books truly opened my eyes to the impact that data collection processes have on how the systems we live in are designed and how data systems are structured to keep power in the hands of the few. Meanwhile, women and non-binary folks, the BIPOC communities, the LGBTQI+ community, disabled people and other minoritised groups are kept at consistently lower steps of the hierarchy. I recognised myself in some of the described stories, and it made it clear that what I had earlier brushed off as one-off experiences were a part of a larger pattern. Thus, the books served as a form of consciousness-raising for me — a term we will return to later in the thesis.

Through the literature, we see the systemic nature in how our infrastructure is built, the protocols that govern how we move through the world, and we see it in every space where power is kept, and decisions are being made. *Data Feminism* tells us to ask who questions; Who decides? With whose interests and values in mind? Who is being left behind?

Situated knowledge is something we will talk more about later in the thesis, but for now, I will just say this: I write this thesis as a white, blond, and blue-eyed, cis-gender young woman. I have lived most of my life in Denmark, a wealthy country in Northern Europe, where I have been fortunate enough to have "free" quality education and "free" healthcare. I use quotation marks because, as we all know, nothing in life is truly free, and in this case, "free" rather means "I'll pay for it through my taxes for the rest of my life". Nonetheless, these opportunities have meant that I have been able to move to Finland, where I have acquired another free university degree. As a co-author of this thesis, making myself known through these descriptors is perhaps something that many in academia would advise against. They might even call it unnecessary. However, in this thesis, we argue why it is imperative, even necessary, to acknowledge the lens through which we view the world.

1.8.2 Eva

Like Henriette, I also got introduced to these topics with the books *Invisible Women* and *Data Feminism*. Inspired by researchers and activists like Joy Buolamwini, Catherine D'Ignazio, Sasha Costanza-Chock, and Cathy O'Neil, I have become very interested in feminist approaches to technology and data, and I keep learning and researching how to apply that to the different disciplines I work in.

From an educational perspective, I write this thesis as someone who has spent most of their recent years affiliated with a university. Currently, I am a master's student in the Creative Sustainability master's programme in Real Estate and Water Management at Aalto University. Trying to explore the role of equity in urban planning has been an exciting journey so far. Since I have been in Finland, there have been many events and talks about smart cities. However, from the ones I attended, only one of them addressed gender equality, and it was from the perspective of having women in planning positions.

Furthermore, even when the conversations are about civic participation in urban planning, I feel that participation ends at bringing people together to a table. It does not challenge the politics of that participation, of who sets the agenda, whose participation is eased or hardened by hierarchies and oppressive systems in society. From a personal perspective, I write this thesis as a white, cis woman, who grew up in Barcelona. However, I also write this thesis from Helsinki, where my university is.

1.8.3 Our Collaboration

Apart from our individual positionalities, we would like to reflect on the limitations and advantages of exactly the two of us working together.

We see a clear advantage in combining our different backgrounds, nationalities, disciplines, and experiences. Each of these characteristics offers the potential for a new viewpoint and has allowed us to challenge each other throughout the entire process. However, even though we have very different backgrounds, we do have very similar mindsets and political opinions, which poses the risk of affirmation bias and thinking that we are holding each other accountable while actually just confirming each other in our bias. Our team and collaborators have been vital in this regard, as they have been able to offer even more external viewpoints and challenge our assumptions.

One of the biggest challenges we faced in completing this project in Finland has been that we are both foreigners who do not speak Finnish. While this language barrier has limited the people we were able to reach, all of whom had to be able to communicate with us in English, our use of English has also made this project more accessible to immigrants who would otherwise not have participated.

Our collaboration enabled us to complement each other, e.g. during interviews, and let each other rest when needed. This was incredibly valuable for us. During interviews, we often agreed for one of us to be the lead interviewer and the other the notetaker. However, we also somehow got into a rhythm of collaboration where we could sense when the other person needed a moment to think, and in those instances, we were able to shift the roles in the interview smoothly.

Finally, in section 7.1, we will present a self-audit of the sources and references used in this thesis as an extension of this dedication to transparency and positionality.

Chapter 2

Approach & Methodology

2. Approach & Methodology

This thesis aims to increase the understanding of the potentials of applying feminist values and principles in so-called "innovation spaces". In this thesis, we refer to feminism as the political, social and economic equality of all people; and we understand innovation not only as a novelty but as giving attention and resources to tackle a particular situation related to a specific community.

To understand such potentials, we complement the existing literature with a perspective from Finland, the country we are based in and where the hackathon took place. We also offer our take on its relation to sustainability; to explore how it all relates to our academic fields of design, real estate and urban planning.

According to Peter Gould (2005), "the traditional dilemma of research and practice is the question of which should lead. Does one wait for innovative practice to occur so that the changed practice can be researched or should innovation always be based on educational research? As with the analogous question of which came first, the chicken or the egg, it may be preferable that they arrive together" (p.1). In our case, we have been shifting between critical and generative modes of thought in a non-linear process, which has allowed us the flexibility to test our knowledge along the way.

Instead of approaching these topics (feminism(s), real estate, land use, urban planning, participatory design and hackathons) as separate, standalone phenomena, we aim to highlight the relations and interdependencies that can be found within them. We aim to do this because, to see how one system can be improved, researching relationships between the different parts can bring more insights than researching the parts separately and in silos (Stroh, 2015). We have therefore conducted transdisciplinary research (TDR), which involves a multitude of research methods. It is increasingly acknowledged that a transdisciplinary approach is both appropriate and needed when addressing complex and socially relevant problems (Gaziulusoy et al., 2016). TDR projects are characterised by being "agenda-driven, requiring the integration of knowledge from different disciplines and involvement of non-academic stakeholders both in problem framing and problem solution" — either directly as researchers or indirectly as informants (ibid., p. 62). TDR projects are messy and complex and therefore require an adaptive approach.

A 2016 study by Gaziulusoy et al. identified four significant challenges in TDR: inherent, institutional, teamwork, and emergent challenges. They can be defined as follows:

1. Inherent challenges: Challenges that directly arise from the characteristics inherent to TDR;
2. Institutional challenges: Challenges that arise from the current structures and procedures of knowledge generation and performance evaluation in an academic institution;
3. Teamwork challenges: Challenges that stem from the requirement of collaboration of researchers from different expertise backgrounds and often from different academic institutions with each other and with non-academic stakeholders in ways to enable transdisciplinary knowledge generation;
4. Emergent challenges: Challenges that create uncertainty beyond the control of TDR project consortiums but may have significant implications for the project execution. These challenges are not directly related to the academic institution, although they may influence the institutional dynamics and the projects (Gaziulusoy et al., 2016, p. 57).

Some of the challenges identified in the study that we recognise from our project are:

- **Knowledge and expertise limitations within the core research/organising team**: as an example, we had a lack of people with expertise and sufficient time to manage marketing and social media;
- **Insufficient administrative support and funding for public outreach and stakeholder engagement**: Our budget was so limited that we relied heavily on personal networks and organic marketing. In addition, it limited our ability to, e.g. establish an advisory board;
- **Difficulty in balancing the systemic and extensive scope of the project and available resources**: We struggled to ensure the long term continuation of the projects;
- **Lack of guidelines for transdisciplinary theses**: We struggled with the shortage of TDR guidelines and recognised that academic performance criteria might discourage TDR projects.

A transdisciplinary approach helped us approach this project from many angles and at many levels despite these challenges. This chapter will explain the use of each research method and how they help us answer our research questions.

2.1 Orientation: Establishing Our Lenses

This thesis offers a theoretical inquiry and grounded research through a pilot hackathon (Feminist Futures Helsinki) led by the co-authors, further described in chapter four. Our orientation throughout this process has been feminist-infused participatory and action research (FIPAR), a framework that highlights (1) reflexivity, (2) multiplicity of voices, and (3) research relationality (building and sustaining relationships). This concept will be explained in further detail in section 3.3.6. Throughout the FFH hackathon, we continuously used a feminist lens, which helped us select the methods and methodologies that would better allow us to study and approach the topics. In addition to what topics to research, this feminist perspective helped us decide how to research the topics.

Concepts such as the matrix of domination (Collins, 2000) and situated knowledge(s) (Haraway, 1988) made it clear to us that the methods should encourage us to reflect on our positionality as researchers and actors. They should also allow us to study issues from different perspectives and support us in discovering insights within the local community through collaborative work.

In short, situated knowledge refers to the fact that all knowledge comes from somewhere. It rejects the idea that knowledge (or data) can ever be entirely objective since it will always be affected by the eyes that see (Collins, 2000). In addition, the "creator" of the knowledge/data will always be placed somewhere in the matrix of domination — a sociological paradigm that describes the intersecting realities of oppression in society (Collins, 2000). For example, a person may be part of dominant groups as a white, cis man but may simultaneously experience oppression because of sexual orientation or physical ability. D'Ignazio et al. (2020) assert that "while traditional researcher-subject dynamics imagine that researchers are on the outside looking in, feminist research methods consider the researchers themselves to be an integral part of any knowledge production, worthy of careful observation and reflection" (ibid, p. 8). This will be reflected in our approach. In addition, concepts on knowledge production will be explained in further detail in sections 3.1.1, 3.1.3.2 and 3.1.5.

According to sociologist Shulamat Reinharz, feminism is a perspective, not a research method. In 1992, Reinharz identified seven themes that are characteristic of feminist research, including that "[feminist research] is guided by feminist theory, involves an

ongoing criticism of nonfeminist scholarship, may be trans- or interdisciplinary, aims to create social change, and strives to represent human diversity" (Lykes & Hershberg, 2012, p. 334) — all of which we believe are present in this thesis.

Feminist scholars such as Patricia Hill Collins, Dorothy Smith, Michelle Fine, and Patricia Maguire similarly use a diverse range of research methods "to facilitate distinct processes of knowledge construction, engagement with women, political activity, and social change work" (Lykes & Hershberg, 2012, p. 334). However, just as you cannot know a person just by asking a single question, you also cannot explore a complex system with just a single method. *It is only through a pluralistic approach that you can enable a pluralistic world.*

2.2 Methodology

All this led us to choose Participatory Action Research (PAR) and ethnography as our primary methodologies. We consider there to be a productive tension between the action-driven curiosities of PAR and the documentation-driven curiosities of empirical research like ethnography. These two can remain separate in theory but very much merge in our work. These methodologies will be outlined in the following section.

2.2.1 Participatory Action Research (PAR): Hackathons as a Design Methodology to Approach Societal Challenges

We decided to use Participatory Action Research (PAR) as an orientation in our thesis because it allowed us to work together with hackathon partners and participants and use empirical data from that work to illustrate the FFH hackathon. This section will explain what PAR is and how we used it in the context of the hackathon.

What is Participatory Action Research (PAR)?

Participatory Action Research "has a social and community orientation and an emphasis on research that contributes to emancipation or change in our society"
(Creswell, 2014, p. 614)

As the name suggests, Participatory Action Research (PAR) is a methodology that combines research and critical thinking with direct engagement with the communities affected and interested by the research topic.

PAR is a popular methodology for community-based research projects and university-based researchers on socially engaged topics (Lykes & Hershberg, 2012). Some of the characteristics that made this method attractive for us are that it allowed us to work directly with the communities we wanted to engage with, making it easier to generate insights specific to the studied context, and which would benefit all co-researchers (ibid., p. 333).

PAR is a methodology that allows researchers to challenge assumptions on neutrality and objectivity by embracing pluralities of knowledge coming from the communities involved in the study (Lykes & Hershberg, 2012). It also challenges the traditional hierarchical relationships between the researcher and the research subject, basing the research on developing trusting relationships towards a common goal and forcing values of commitment, reflexivity, and criticality (Sawhney & Tran, 2020, p. 3).

PAR in the context of the FFH hackathon

In our case, our research topic was organising a hackathon that would centre key challenges in feminist topics in our local environment (Helsinki). We knew that this would not be possible by only doing a literature review, so engaging with different local communities in Finland, such as community-based and grassroots

organisations, was imperative. This way, the organisations could help us navigate the historical, cultural, and geographical context of the hackathon. Therefore, we conducted PAR to explore hackathons as a design methodology to approach societal challenges.

In the context of the FFH hackathon, our community consisted of our team members, partners, and participants to imagine, plan, execute, and, ultimately, experience the hackathon together by sharing activities, mentoring sessions, and reflections. Chapter four of this thesis will provide more details on the FFH.

Working so closely with our partners to organise different elements led us to understand how to develop the fundamental milestones for a hackathon. This process included co-designing the project briefs with the track partners, developing a public programme with the speakers, or curating materials for mentoring fellow designers. Planning something both concrete and technical while having these vulnerable conversations helps curate the experience that leads to the insights of a feminist hackathon.

Therefore, by organising the FFH hackathon and participating in experiences with the participants, we both obtained "data" as well as better inputs on how to analyse and interpret what had already been seen and experienced. Thus, the PAR methodology is an overarching approach to research that is present throughout this thesis.

2.2.2 Ethnography

Ethnography is a qualitative and holistic approach to studying cultural systems that analyse the interrelation of people's principles and behaviours (Hammersley, 2017). This analysis happens through a range of methods that allow researchers, through personal engagement, to understand a particular social meaning, culture or setting within people's ordinary activities (Brewer, 2003; Hobbs, 2006).

Ethnographic methods tend to be iterative, repetitive, flexible, and creative and support an ongoing learning process (Hammersley, 2017, p. 8; Whitehead, 2005, p. 6). Like PAR, these methods guide the researcher towards a process that encourages discovery, reflection, and continuous queries instead of rigidity (Hammersley, 2017, p. 8).

Ethnographic observations of hackathon activities

Fieldnotes and observations were fundamental to our ethnographic approach as they allowed us to keep track of cultural phenomena discovered while in contact with our hackathon community: partners and participants.

Ethnographic observations may include reflections on the actors, the space, the object, the behaviours, the events, and the time (Spradley, 1980). In addition, spending time with participants (in our case, in the hackathon activities) enables more contextual documentation not only of "what" happens but of "how/why" that happens (Hammersley, 2017, p. 8). This contextual understanding of the how and why is one example of what could have been missed if, instead of ethnography, we had followed a positivist orientation (Hammersley, 2017, p. 8; Whitehead, p. 8).

Journaling (audio and text)

PAR and ethnographic methods both encourage open-ended learning, reflexivity, and continuous queries (Hammersley, 2017; Lykes & Hershberg, 2012; Sawhney & Tran, 2020; Sawhney et al., 2018; Whitehead, 2005). The ethnographic observations we made were recorded continuously in the form of journaling. We kept written and audio journals before, during, and after the hackathon, and they included reflections on our positionality, the design considerations, and the organisation process. The

journals allowed us to keep track of events, such as contexts in which we challenged our assumptions. Documenting the chronology and frequency of these events allowed us to bring those topics to chapter five of this thesis, the discussion.

We believe journaling was a suitable method for acknowledging how our position and values might affect the interpretation of what we organised and researched. In addition, journaling has also been found to be a helpful method for researchers to cope with emotionally demanding research labour (Malacrida, 2007). By identifying feelings as they arise, such as concern, alienation, sadness, and hopelessness, researchers can build an emancipatory consciousness to contribute to emancipatory research (ibid.).

The ethnographic observations of activities created data that was used for:

- Chapter four: The description of the FFH hackathon
- Chapter five: The discussion, using quotes from the participants and partners

2.3 Methods

"The limits of my language mean the limits of my world"
Ludwig Wittgenstein, 1921, Tractatus Logico-Philosophicus.

In the words of Cruz Garcia and Nathalie Frankowski: "If you don't have the tools to communicate, you won't be able to address whatever it is you're grappling with. (...) We're dealing with ideas we cannot even articulate because we lack the tools and strategies to do so. Similarly, sometimes you cannot communicate a certain idea just by drawing a building. Sometimes you have to write, you have to make a film, write a poem, paint, perform, teach — you have to search for the media that will allow you to represent the question you're asking. The more limited your vocabulary and its sources, the harder it is to address the subject at hand" (Garcia & Frankowski, 2021).

Like Cruz Garcia and Nathalie Frankowski, we too have searched for the methods that would best allow us to tell this story. The following section is an introduction to the methods we employed in this research.

The multidisciplinary nature of this study encouraged us to use several methods for different purposes. The following tables illustrate the methods used to answer each research question, how they were used, and what are the main insights that emerged from them.

Research Question(s)

(1) How might hackathons be designed with feminist values and principles at the core to facilitate creative forms of participation for socially engaged design practices?
(1.1) What are the benefits and challenges of applying feminist values and practices in hackathons?

Methods / Action

Literature review

- To understand what feminist values and principles are
- To understand different types of participatory methods and practices within design and urban planning
- To understand the characteristics of hackathons
- To understand the established strengths and critiques of all four main themes: feminism, real estate, land use, urban planning, participatory design and hackathons

Organising FFH

- To test our assumptions, and try new practices
- To foster critical thinking and engage with different stakeholders and community members

Mentoring from our sister hackathon Our Feminist Futures

- To learn from the team's experiences
- To compare our experience with theirs to gain awareness of whether it was a consequence of our circumstances or more of a consequence of the format

Project cases

- To test the applicability of feminist values and practices on the project-level
- To illustrate the result of the 11 design principles on an individual project level

Semi structured interviews

- To hear what the experience in the hackathon was like in the words of the participants and partners
- To have an opportunity to explore topics that we did not know to ask about, but that had been significant for participants and partners

Written participant surveys

- To gather data for benchmarking for future events

Ethnographic observations

- To observe how the intended impacts played out — with participants, partners, organisers, speakers, and others involved

Journaling

- To document our struggles before, during, and after the hackathon. These especially helped us realise what the challenges are of applying feminist values and practices in a hackathon
- Journaling also served as the medium for our feminist practice of self-reflexiveness

Diagram sketching

- To understand the systems within which we were working, and to communicate to others the processes we created

Results / Insights

11 Design principles

We found that setting design principles rooted in intersectional feminist values to guide our decisions throughout made the process much easier. It also made it easier for us to explain to others how we concretely implemented feminist values and practices.
The principles included "The hackathon should attract and reach participants beyond academia and tech" and "No winners will be named". These were two of the principles that made the FFH hackathon stand out compared to traditional hackathons.
The design principles were in large inspired by our knowledge from *Data Feminism* (D'Ignazio & Klein, 2020) and *Design Justice* (Costanza-Chock, 2020), as well as our mentorship with Alexis from Our Feminist Futures.

Challenges

Perhaps the most surprising challenge for us was the level of emotional labour we as organisers had to put into the work. Somehow, we were aware of the emotional labour that would be expected from the participants, but we underestimated the weight of the work on ourselves.
In addition, there are certain tensions (namely time, money, trust, and expertise) which are present in feminist hackathons.

Benefits

Some of the most significant benefits of organising the hackathon in the way we did, was (1) to see the appetite for social and political engagement and (2) to see the connections that were made along the way.

Research Question(s)

(2) What are the benefits, and who are the beneficiaries, of bringing together multidisciplinary teams to work on projects proposed by community organisations?
(2.1) How might the emerging insights from this work serve as a bridge between intersectional feminism, urban planning, participatory design approaches and the Finnish hackathon scene?

Methods / Action

Literature review

- To understand where the current divergence is located between ethos and practice in the four main themes: feminism, urban planning/real estate economics, participatory design and hackathons
- To understand how different types of participatory methods have previously aimed to bridge disciplines
- To understand who is currently benefitting from hackathons

Organising FFH

- To experiment with flipping the traditional model, and actively centring community organisations

Mentoring from our sister hackathon OFF

- To develop our hackathon based on the learnings and experiences from previous feminist hackathons
- To reflect on the potential role of academic institutions in feminist hackathons from an Aalto & MIT perspective

Project cases

- To analyse who benefits on the individual project level
- To analyse the intersections of the four main themes on the individual project level

Semi structured interviews

- To explore what benefits the participants and partners highlighted

Written participant surveys

- To gather data on participant's experiences and perceptions
- To provide additional space for anonymous feedback

Ethnographic observations

- To observe how expectations of participants and partners were met (or not met) — in order to analyse who benefitted

Journaling

- To document our struggles before, during, and after the hackathon. These especially helped us realise who benefitted, and which expectations were not met

Diagram sketching

- To visualise the stakeholders
- To visualise how the literature from the four main themes overlapped and intersected

Results / Insights

Beneficiaries

According to our findings, who benefits depends heavily on (1) the complexity of the topic at hand, (2) the time and money available, and (3) the expertise of the team tackling the project.
A project with higher complexity will likely also have a longer history (e.g. Sámi issues) which in turn will require more time to understand the context. The complexity will often also be reflected in the level to which the community/communities are marginalised, which then requires more time to build trust and more money to compensate collaborators. Finally, the expertise in the team will affect who benefits (and to which degree). For example, if the team consists of HCI experts, but what the community organisation actually needs is political action or additional funding, the team might benefit more than the organisation since the team will gain knowledge and experience.

Benefits

The benefits of bringing together multidisciplinary teams to work on projects proposed by community organisations include:

- Increased attention on the work of the organisation
- Increased awareness amongst hackathon participants
- Multilateral community and network building
- Potential to shift public discourse by bringing attention to topics and issues that are otherwise ignored
- Feminist futures imagined in a hackathon may function as a tool for backcasting

Academic institutions

Our research exhibited an opportunity for universities and other academic institutions to play a more significant role in the bridging of different disciplines.

Bridging disciplines

We argue that there is a productive tension between these four disciplines: feminism (focus on equity and power and thinking beyond binaries), built environment (creation of our physical environments), design (curiosity about possible futures and a productive tendency), and hackathons (urgency and encouragement to rethink), and this productive tension may be harvested through feminist hackathons.

2.3.1 Mentoring From Our Sister Hackathon, Our Feminist Futures

The idea to organise the FFH hackathon came from the Our Feminist Futures (OFF) hackathon at the MIT, organised by the Make the Breast Pump Not Suck Collective. Running the FFH hackathon in parallel with the OFF hackathon implied that we had to follow a similar structure and schedule as the MIT team. Since we first contacted them, Creative Director of the collective and MIT designer and researcher Alexis Hope engaged in conversations to support the FFH organisers throughout our journey. The mentoring took place in the form of emails, informal conversations via Zoom, and an interview. In the interview with Alexis Hope, we discussed the implications for research of feminist hackathons, such as the role of universities or questions of equity in participation. These can be found in further detail in chapter five.

The OFF hackathon and the mentoring from their team served us as a framework to develop our hackathon. Our work builds on theirs.

2.3.2 Semi-Structured Interviews

Reflecting on one's situatedness and partial knowledge (Haraway, 1988) is central to this thesis. We chose a PAR approach because we wanted to bring reflexivity to the core of our hackathon and be in an ongoing dialogue with participants. Part of this dialogue also means that as researchers, we deconstruct the assumptions we had when designing the hackathon and learn from our hackathon community's experience, knowledge, and expertise. Therefore, after the hackathon, we conducted semi-structured interviews to understand their hackathon experience and put it into context with our research questions.

Having the chance to interact once again with partners and participants through semi-structured interviews allowed us to pursue a detailed inquiry into the individuals' experiences, bounce ideas off them, and hear their reflections on how we might have done things differently (Adams, 2015). In addition, by conducting semi-structured interviews, we were able to ask questions that allowed us to compare different experiences and let the interviewees lead us to the topics that were most important to them.

These interviews were conducted using an interview protocol tailored to each interviewee's role (Porter et al., 2017). The protocol consisted of questions that helped us guide the conversation. Each protocol for the participant interviews explored the following areas:

- Personal journeys and team dynamics, as it is a feminist practice to reflect on one's situatedness and experience and connect it (Haraway, 1988; hooks, 2015). We aimed at understanding if the hackathon structure had encouraged reflexivity.
- Highlights and challenges from the hackathon experience, as we learned from the MIT team that learning what worked and did not work in previous hackathons supported them in the feminist process of reflecting on and challenging their own process and design decisions. In addition, it also helped them improve their next hackathons.
- Project-specific questions, as we wanted to combine knowledge from literature review and knowledge from experience. Furthermore, we wanted to include the participants' experience because feminist practice considers the experience lived as feeling bodies as something as important as the studied topics themselves (D'Ignazio & Klein, 2020).

The partner interview protocols explored topics of expectations, perceptions of the hackathon's success and communications, based on the same goals of seeing reflexivity as something positive to cultivate critical thinking in our own work.

A total of 18 individuals participated in interviews.
- With participants (n=12).
- With partners (n=5)
- With one organiser from the MIT hackathon (n=1)

For the interviews, we invited participants and partners who had been very vocal and engaged throughout the process and expressed some level of interest in contributing to the research. Therefore, it is essential to note that these participants do not represent all perspectives from the hackathon.

The interviews were transcribed using coding of subject and sentiment (positive, negative, neutral, or suggestion). E.g. feedback expressing joy or inspiration about the hackathon experience was coded as positive, while feedback about struggles with teamwork or struggling with the density of the programme was coded as negative. When interviewees made proposals for improvement or other future initiatives, that was coded as suggestions. Any other comments or reflections that had neither a positive nor negative sentiment were coded as neutral (e.g. when sharing experiences from other events without relation to FFH). All transcriptions and input in this thesis about the interviews have been anonymised. The interviews were recorded for transcription. The recordings were permanently deleted after the transcriptions were made (maximum six weeks after the interview).

The data from semi-structured interviews was used in:
- Chapter four: To describe the outcome and continuation of the FFH hackathon (section 4.4) and the four cases (section 4.5). We also included quotes from semi-structured interviews throughout chapter four to make the participant voices more visible and present
- Chapter five: In the discussion

2.3.3 Written Participant Surveys

Like in the semi-structured interviews, the purpose of conducting surveys was to consider different situated knowledge (Haraway, 1988) and value participants' experience. In addition, this method aimed to provide additional space for comments that participants perhaps wished to share anonymously. Survey research is defined as "the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2012, p. 160). This method allows for a mixed-methods approach, i.e. combining quantitative and qualitative questions (Ponto, 2015).

In the written surveys, participants were given space to give feedback on the design, organisation, and concept of FFH. We chose these topics because they differed from traditional hackathons, and therefore we had had less of a model to follow. Therefore the feedback was very valuable for us. We sent out two surveys (number of respondents indicated):

- Halfway feedback (n=15)
- Final feedback (n=11)

Unlike with the interviews, we did not control who responded to the surveys. We have weighted all responses equally.

The halfway feedback was sent out at the halfway point of the hackathon because it allowed us to identify problems in the hackathon that could potentially be addressed in the second half. The final feedback form was sent after the Showcase, the final event of the hackathon. The surveys were created with Webropol and designed in accordance with the GDPR standards, and the responses were anonymised.

The data from the written participant surveys were used in:

- Chapter four: To describe the outcome and continuation of the FFH hackathon (section 4.4) and the four cases (section 4.5). We also included quotes from semi-structured interviews throughout chapter four to make the participant voices more visible and present
- Chapter five: In the discussion

2.3.4 Project Cases

This thesis will present data from the hackathon through the exploration of four case studies in section 4.5. These cases are four out of the 12 projects from the hackathon. First, from the Urban Futures track, we will analyse the Cities built for the people and Inclusive Lapinlahti projects. Second, from the Eco-Justice Futures track, we will analyse the Sámi allyship project. Finally, from the Inclusive Futures track, we will analyse the Enabling age-inclusive participatory communities project.

On the one hand, we chose Cities built for the people and Inclusive Lapinlahti because they offered interesting perspectives to challenge current practices and understandings of value in the real estate sector. On the other hand, we chose the Sámi Allyship and Enabling age-inclusive participatory communities because they offered perspectives on decoloniality and age-inclusive perspectives to social sustainability, which we personally found interesting to explore further. Cases can help illustrate situations that give a more descriptive context to the real-life environment behind the projects (Zainal, 2007).

The cases are presented as project descriptions, where we reflect on the team's journeys and their outcomes. The analysis of the cases is made with the data arising from (1) the ethnographic methods and (2) the literature review.

From the ethnographic methods, we collected data from (1) interviews notes, (2) survey responses, (3) public recordings of the teams' final presentations in the Showcase, (4) visual materials submitted by the team (e.g. screenshots, slides, and images) and (5) notes from our ethnographic journals. For example, to analyse the Inclusive Lapinlahti case, we analysed the notes from the interviews with members of that group, survey responses from members of that group, and notes from their final presentation in the Showcase.

In addition, we also combined empirical data with the literature review in chapter 3. In every case, findings from ethnographic methods are combined with findings from the literature review on feminism(s), feminist urban planning, designing (for) participation, and the culture and politics of hackathons.

The data from the cases was used in:

- Chapter four: In the cases (section 4.5)
- Chapter five: In the discussion, in the form of quotes and reflections

2.3.5 Diagram sketching

In order to visualise several systems and understand how they connect, we chose to use diagram sketching because it is considered a method for sensemaking (Vistisen, 2014). This method supported us in creating new knowledge by interpreting how past events and experiences add to the original premises of the research study (ibid.). We have used diagram sketching to visualise a stakeholder map; a diagram of how we established partnerships; a diagram of how the foundations in the literature build on top of each other; a diagram of the tensions identified in feminist hackathons; and more. The diagrams have served as a way of sensemaking for us.

For example, the purpose of a stakeholder map is to answer the question: Who are the most important people and organisations involved in this experience (Stickdorn et al., 2018)? In our case, diagramming helped reveal not only all the people directly involved with the hackathon but also the communities and organisations that were indirectly influenced in return. In addition, sketching a diagram of our process of establishing partnerships strengthened our understanding of the process of reciprocal influence.

2.4 Ethical Considerations

Ethical considerations are central to feminism, PAR and ethnography, as questions about values and equity are not only rhetorical but also something that must be reflected in the practices and research activities. In this thesis, we followed the ethical considerations listed below:

2.4.1 The Emancipatory Potential of the Projects

Protocols to ensure the emancipatory potential of participants and co-researchers is seen as one of the essential metrics for ethical PAR projects (Khanlou & Peter, 2005). In this regard, projects were designed, conducted, and mentored to reflect the interest of partners and participants.

Our organising team decided that the project topics should come directly from our partner organisations. More information about this design decision can be found in section 4.2

Participants had the chance to challenge the project briefs they were initially given and self-determine the direction that fit the team best.

However, the lack of resources restricted the emancipatory possibilities that the hackathon could give partners and participants ownership of ideas or continuation opportunities.

2.4.2 Matching Participants With Topics

When the hackathon applications opened, participants could choose what track they preferred to work in (Urban, Inclusive, Well-Being or Eco-Justice Futures). However, only a general description of each track was available, as the details of the 12 projects were still being developed with the partner organisations. Once the projects were defined, we matched the participants according to experiences, wishes, and expectations. Participants were allowed to change projects if they felt they did not wish to/could not work on the project assigned to them. In hackathons, participants will typically only know the bigger context in which they will work (for example, mobility in cities); It is not until the first day of the hackathon that they find out what exact challenge they will tackle. However, "traditional" hackathons do not tend to focus on emotional labour, which the Feminist Futures Helsinki hackathon had — more information about this will appear in subchapter 3.4: The culture and politics of hackathons.

2.4.3 Budget and Compensation

Due to budget constraints, the investment of time and emotional labour from participants, partners, and organisers was undercompensated. Details on how budget constraints posed a challenge for this hackathon can be found in chapter five.

2.4.4 Location of Power in PAR

There are concerns about unequal power distributions between researchers and participants. These include situations where researchers can plan the project in a way that benefits their academic purposes primarily or can hold a patronising and condescending attitude towards participants by overestimating their capabilities and underestimating the ones from the participants (Löfman et al., 2004, p. 337). In the hackathon, we tried to be mindful of setting structures in which our power as organisers did not overstep in the creation of agendas and content of the hackathon. For example, we did not want to be responsible for deciding the topics of the projects or the topics for the public talks. Instead, we approached potential partners and asked them to think about what would be beneficial for them to explore further (in a project) or what topics they would like to talk about in a public event (public talks). We assumed that the absence of a restricting format would give power to participants.

More information on the choices we made to organise the FFH hackathon are presented in section 4.2, and the benefits and tensions of such choices are discussed in chapter five.

2.4.5 Confidentiality and Anonymity

References about participants are anonymised in the thesis. Appearance in public hackathon events was voluntary. At the beginning of events that would be recorded, the organising team provided guidelines on participating without being recorded. In addition, we offered that any audience member that wished to contribute but not be in the recording could be edited out before publication.

2.4.6 Protecting Participants From Harm

There were safer (online) space principles in place, feedback forms and appointed track ambassadors. Regardless, there is much room for improvement in understanding how to design hackathons that can be both proactive and reactive to situations of conflict and harm occurring along the way. More information on the safer (online) spaces principles can be found in section 4.2, and more information on the culture and identity of the hackathon can be found in section 4.4.1.

2.4.7 Informed Consent on Participation to the Research

All participants were sent a consent form on the first day of the hackathon. On that day, we also took time in our initial presentation to explain the aims and intentions of the research described in the form. We explained that the research would be done mainly by (1) documenting and reflecting on our design considerations, including language, format and whom we have prioritised to give space for; (2) conducting interviews after the hackathon with several participants and partners to learn more about their experience in the hackathon, and to understand how we had succeeded and failed on our goal(s); and (3) reflecting on what we valued and how that showed up in the outcomes of the hackathon.

A handful of participants did not sign the consent form, so this thesis will not analyse their work. Interviewees also signed an Informed Consent form ahead of the interviews. The consent forms were created using Webropol. We used Webropol for all data collection (consent forms, applications, event registration, feedback) because it

is the tool recommended by Aalto University, and its features ensure compliance with GDPR standards. For the most part, only the co-authors had access to the data.

The participants were asked to consent to (1) being contacted after the hackathon to schedule an interview and/or (2) let us take ethnographic notes made during the team's mentoring sessions. We specified that by notes, we meant "the researchers' personal interpretation of hackathon and events dynamics. Fieldnotes can also include a reflection on the outcome produced by the teams at the end of the hackathon. All references to participants will always be anonymised." Consent to participate in the research was given voluntarily, and we clarified that the consent could be withdrawn at any time. A total of 38 participants gave consent to participate and be contacted for a future interview. Out of these, only 12 were interviewed in semi-structured interviews. Some researchers have raised concerns about gaining "informed consent" in PAR and ethnographic research as, by definition, the focus of ethnographic fieldwork can change over time, so what participants can give consent to at the beginning might not be the same that was finally studied (Hammersley, 2017; Khanlou & Peter, 2005; Löfman et al., 2004). However, feminist epistemologists criticise research methods that appear detached and objective (Malacrida, 2007, p. 2), as the focus and the research will always be determined by the researchers' position (ibid.).

We tried to mitigate this risk by clearly communicating what type of data and input we would use for the thesis. For example, in the hackathon, although all participants contributed to shaping the environment and the experience of the hackathon, we only included observations about projects and cases to which the participants had given consent.

Chapter 3

Background:
Literature Review

Chapter 3

Background:
Literature Review

3. Background: Literature Review

This literature review mentions traits and experiences such as gender identity, race, class, ability or caring responsibilities, and forces of oppression such as neoliberalism or imperialism as relevant characteristics that matter to any topic involving people or institutions. Nevertheless, despite so many decades of activism, research, and work on these issues, it seems there remains an inadequacy in how we account for them, especially outside academic and theoretical contexts.

In this review, we will be diving into four critical areas of research and practice: (1) Feminism(s), (2) Real estate, land use, and urban planning, (3) Designing (for) participation, and (4) The culture and politics of hackathons.

The following figure, the Foundations of the literature review, illustrates how the concepts discussed in the following chapters interconnect and build on each other.

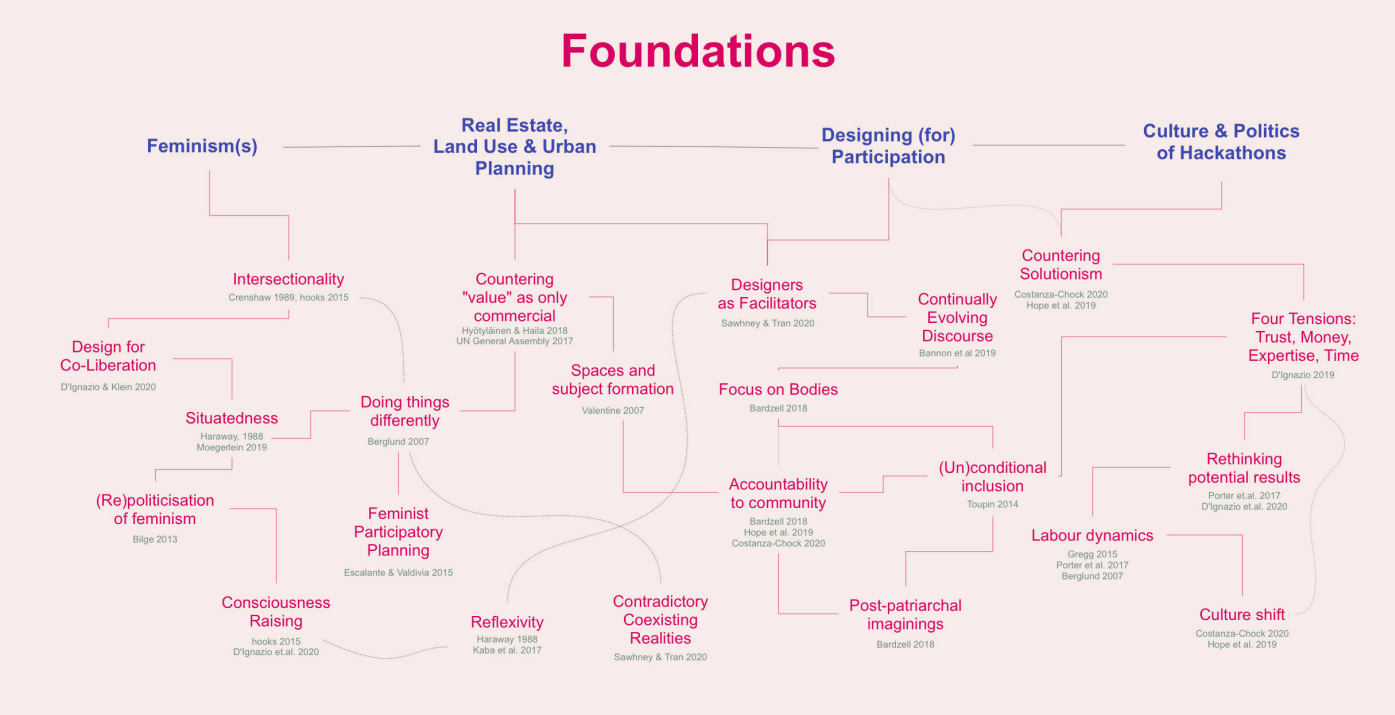


Figure 3.1: The Foundations of the Literature Review. Map showing the interconnections between the key concepts we are exploring through existing literature. The format of this map was inspired by a similar map by Australian designer and researcher Kimberley Crofts.

Our aim in the first chapter is not to offer a complete overview of what feminism is or what the forces of domination to overcome are. We acknowledge that many scholars have already contributed to this, and it is beyond the scope of this thesis to offer extensive analysis.

Rather than analysing every aspect of intersectional feminism in-depth, we believe there is more value in raising awareness about what hinders feminism from being intersectional. In addition, we will explore how these challenges connect with the fields we work in, such as sustainability in the built environment or design.

The first subchapter will serve as the foundation for exploring how feminism relates to urban planning, participatory design and research, and hackathons.

3.1 Feminism(s)

"Feminists are made, not born. One does not become an advocate of feminist politics simply by having the privilege of having been born female. Like all political positions, one becomes a believer in feminist politics through choice and action" (hooks, 2015).

Since feminism is at the core of everything we have done for this project, we thought it appropriate to start the literature review here. Emotions (positive and negative) are still entangled in feminism, which plays into how different people experience it. While we cannot cover the complete history and significance of feminism in this thesis, we will introduce different perspectives on and from feminism relevant to the hackathon. For this reason, we have called this section "feminisms" in the plural.

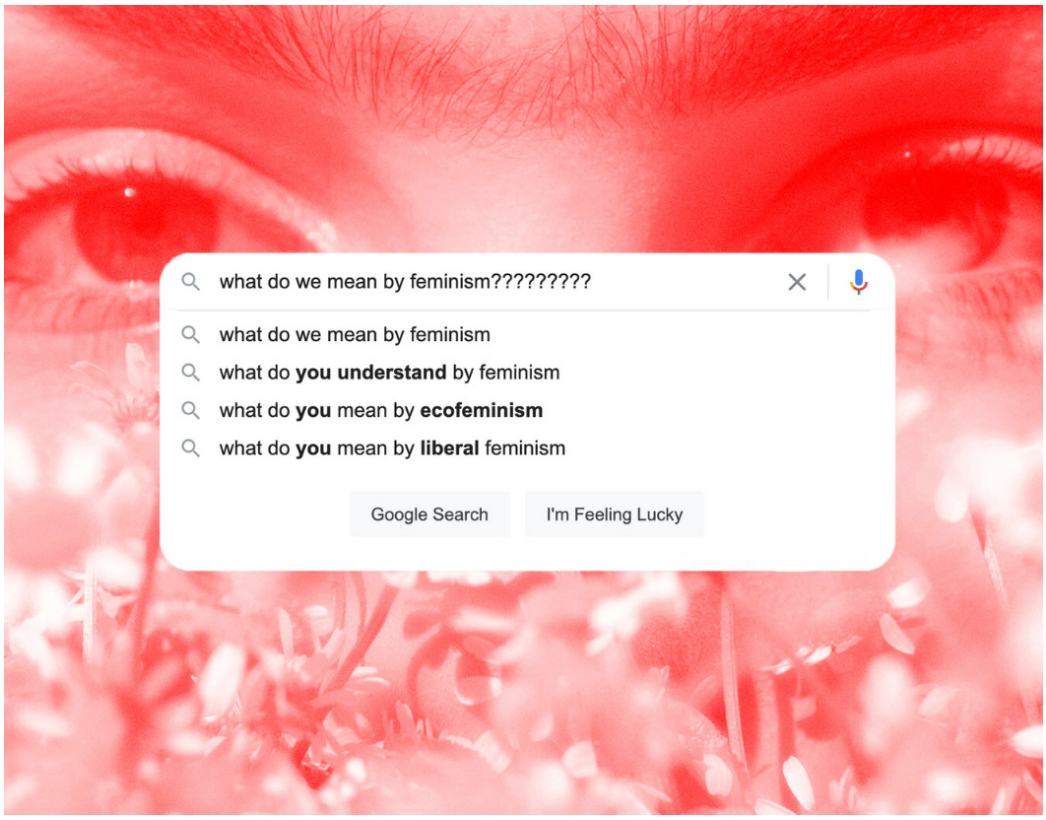


Figure 3.2: 'What do we mean by feminism?', by Helmi Korhonen for Feminist Futures Helsinki (2021)

There is no singular understanding of or path to feminism. Instead, each individual seeks out a feminist theory that speaks to their personal experiences (hooks, 2015). This individualism has led and continues to lead to many different definitions of feminism.

** bell hooks prefers her name to be written in lowercase to shift the attention from her identity to her ideas (Lee, 2019)*

At the same time, it should be mentioned that scholars such as bell hooks* have criticised the notion that there can be many "feminisms". hooks argues that the idea of multiple feminisms enables conservative women seeking status and class power to, for instance, claim that one can be both feminist and anti-abortion (hooks, 2015). This, she argues, is against the very basic feminist principle of having the right to your own body. It is not about whether someone has an abortion or not, but about the opportunity to choose.

Beyond the mainstream term "feminism" or "feminist", women of colour in the United States describe their work around these issues as "womanist" (Walker, 1983), "Black feminist" (Collins, 1989), and "mujerista" (Dyrness, 2008). These terms each challenge the white privilege inherent in much of the second-wave feminism of the 1970s and

"When we say 'Feminist Futures', we are talking about anti-racist, decolonial, accessible, equitable, and just futures for people of all genders and all backgrounds. Our definition of feminism begins with the belief in, and the advocacy of, the political, social and economic equality of all people"
(Feminist Futures Helsinki, 2021)

1980s. They contribute to an "increasingly diverse and critical theory, research, and practice" (Lykes & Hershberg, 2012, p. 333)

Keeping these contradictions in mind, we will refer to feminism and feminisms interchangeably throughout the chapter. When we use the term in the plural, it should not be understood as an acceptance of all forms of feminism but rather an acknowledgement of the broad spectrum of perceptions.

3.1.1. Situated Knowledge

The term 'situated knowledge' was coined by Donna Haraway (1988) in an essay titled "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective". Even 30+ years after the publication of this essay, its essence is still as relevant as when it was written in 1988.

Situated knowledge relates to "objectivity", in science in particular, but it can be applied to every aspect of life. On how this term emerged, Haraway explains: "We wanted a way to go beyond showing bias in science (that proved too easy anyhow) and beyond separating the good scientific sheep from the bad goats of bias and misuse" (Haraway, 1988, p. 578).

The critique, in essence, refers to what Haraway calls the "god trick" (Haraway, 1988). The assumption in scientific 'objectivity' is that knowledge can be created from nowhere, from some fuzzy spot in the sky, like a god. Haraway calls this a trick "because it makes the viewer believe that they can see everything, all at once, from an imaginary and impossible standpoint. But it is also a trick because what appears to be everything, and what appears to be neutral, is always what she terms a partial perspective" (D'Ignazio & Klein, 2020).

The abovementioned "neutrality" is closely related to marked-unmarked relations. The "unmarked" refers to the dominant default in any given situation — in the case of scientific research, design, urban planning and other fields, this default is more often than not the white, cis, non-disabled male. The un-marked bodies thereby "claim the power to see and not be seen, to represent while escaping representation", a privilege only afforded to the few (Haraway, 1988). In the United States, and really across most of the Global North, designers often assume that the user they are designing for has broadband internet access, unless it is specified that they do not; that the user is straight, unless it is specified that they are LGBTQI+; that the user is cisgender, unless it is specified that they are nonbinary and/or trans*; that they speak and understand English, unless it is specified that they do not; that they are not Disabled, unless it is specified that they are; that they live in a house/flat, unless it is specified that they are without housing, and the list goes on (Costanza-Chock, 2020, p. 47). These assumptions often leave us with products, systems and events that, in the best-case scenario, only cater to a very narrow audience/user group — and in the worst case, perpetuate harmful structures and reinforce systems of oppression.

The feminist approach to knowledge comes through an understanding and acknowledgement that all thoughts and observations reflect their creator's interests and positionality (Collins, 1989; D'Ignazio et al., 2020; Haraway, 1988). Positionality is not inherently good or bad in and of itself. The critique of current practices is rather that it is seldom acknowledged.

The antidote to this then, and one of the steps on the road to situated knowledge, is reflexivity. In their book *Data Feminism*, author, artist, software developer, and professor Catherine D'Ignazio and professor and author Lauren F. Klein describe reflexivity as "the ability to reflect on and take responsibility for one's own position within the multiple, intersecting dimensions of the matrix of domination" (D'Ignazio & Klein, 2020, p. 64) — something that is practised within consciousness-raising.

3.1.2 The Matrix of Domination

The path to understanding feminism is undeniably a path of understanding power and how it operates in time and space. We frame our understanding inspired by a decolonial approach to time in which it is not linear, but is inclusive of contradictory and co-existing presents, is mindful of the need for healing of the past, and considers the future(s) as the terrain for current processes of imaginations (Vergès, 2021). Although conceptualising and writing about power can be challenging, being as specific as possible in who had/has/will have the power in all these imaginaries of time appears to be essential to dismantle systems of oppression, rather than just acknowledging that "power exists". This chapter will explore several methods and tools to think about power and where it lies in different societal contexts.

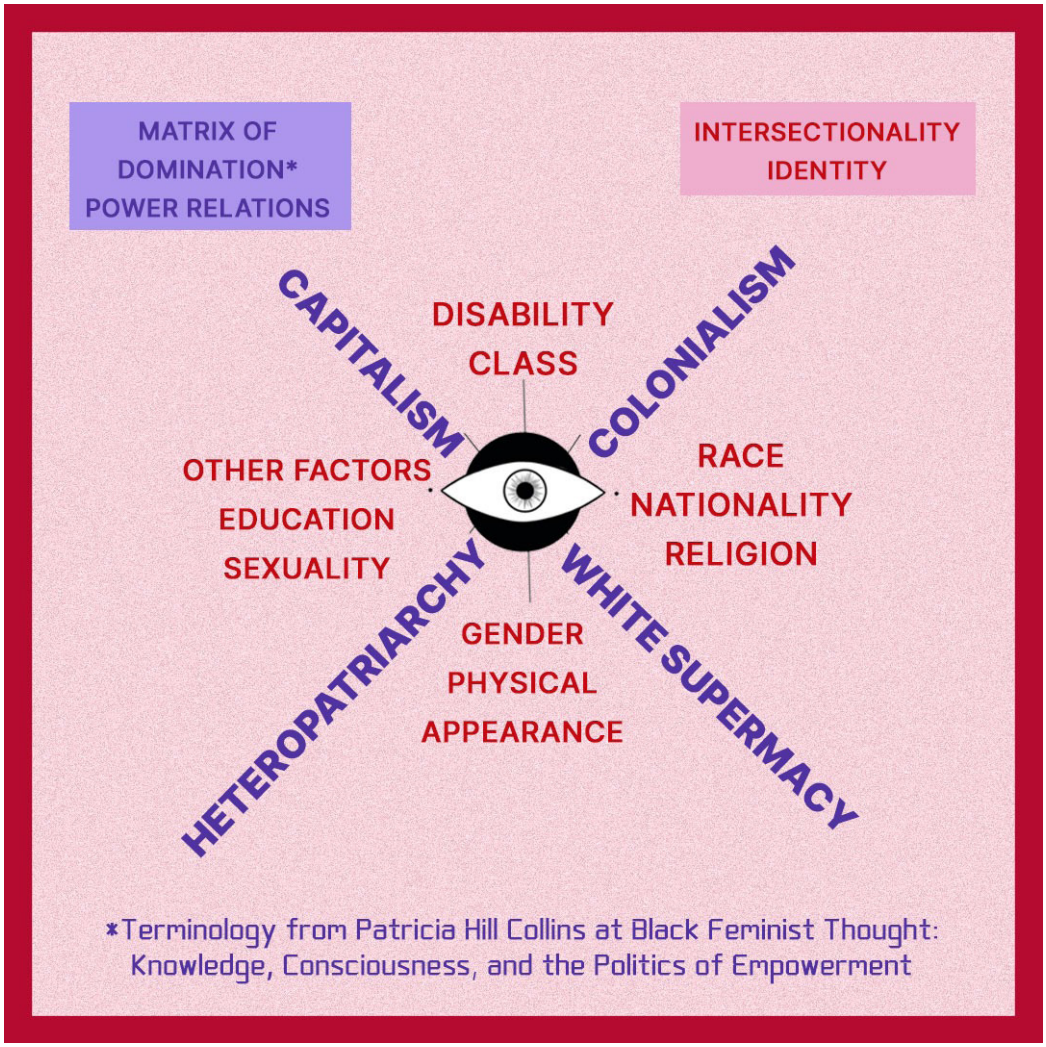


Figure 3.3: Matrix of Domination. Graphic by Joana Varon and Clara Juliano adapted for Deep Dives (Varon, 2020).

The matrix of domination is a framework and tool to understand how different forms of oppression and power differentials unfold in different categories. Patricia Hill Collins introduced the term in the 1990 edition of her book *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Collins centred those

categories around the intersection of race and gender and consolidated them, seeing how those interacted with class, criminality, wages, and representation, among others. The result is the definition of four interconnected social dimensions (domains): the structural domain, the disciplinary domain, the hegemonic domain, and the interpersonal domain (Collins, 2000). The following table, elaborated by D'Ignazio and Klein in *Data Feminism*, illustrates the characteristics of every domain. The four domains cover the overall organisation of power in society, from laws and policies to individual experiences of oppression.

Figure 3.4: 'The four domains of the matrix of domination', by D'Ignazio and Klein (2020). D'Ignazio and Klein created this chart for *Data Feminism* based on concepts introduced by Patricia Hill Collins in *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment.*

3.1.3 Intersectional Feminism

The theory around intersectional feminism emerged from the experience and work of Black women and Black feminist thought and epistemology. The term intersectionality was coined by civil rights advocate, lawyer, philosopher, and scholar Kimberley Crenshaw in 1989 to illustrate how many Black women's experiences could not be fully understood under the traditional boundaries of race or gender discrimination (Crenshaw, 1989). In her work, Crenshaw pointed out that "strategies based solely on the experiences of women who do not share the same class or race backgrounds will be of limited utility for those whose lives are shaped by a different set of obstacles" (Crenshaw, 1991). Thus, intersectionality can help us think that people experience discrimination and oppression differently, based on a plurality of factors and depending on how these collide.

Scholars such as professor Sirma Bilge and professor and social activist bell hooks critique that the popularisation and academisation of the term "intersectionality" has led to the depoliticisation of the term and separated it from the original struggles (Bilge, 2013; hooks, 2015). The initial vision of "generating counter-hegemonic and transformative knowledge production, activism, pedagogy and non-oppressive coalitions" (Bilge, 2013) was compromised when the term was "confined to an academic exercise of meta-theoretical contemplation" (ibid.).

Even a term that aims to be mindful of how different systems of oppression might interact is not exempt from being neutralised of political potential (Bilge, 2013; Mohanty, 1988) by those same systems of oppression. The following section will present some of the perceived risks that hinder feminism from being genuinely intersectional.

Factors for the depoliticisation of feminism(s)

Concerns on the flattening of the political action of feminism are often attributed to the ongoing dynamics of neoliberalism, capitalism, colonialism or imperialism within the movement. The way these intersect poses the risk of neutralising the political potential of both the movement and the discourse. This subchapter will not discuss which force of domination causes what, as they seem to overlap and intersect. Instead, it will offer insights into what some of the established positions are around these challenges.

White supremacy and racism within the feminist movement has been and continues to be one of the main threats for feminism to be intersectional. For example, when referring to global feminism, hooks shared how "privileged-class white women swiftly declared their 'ownerships of the movement, placing working-class white women, poor white women, and all women of color in the position of follower'" (hooks, 2015, p. 44).

Bilge exposed how the whitening of intersectionality occurred by decentering the role of race in the intersectional feminist discourse and praxis and thinking that intersectionality appeared "because it was in the air" (Bilge, 2013), without actively recognising the role that Black women and Black feminism had in it. Bilge explains how white feminists started removing "race" from the discourse and changed it to terms like ethnicity, culture or religion, enabling them to avoid talking about race while claiming the movement. Ironically, contrary to how it started. It emerged from the need for recognising the racism that Black women experienced within the feminist movement (Bilge, 2013).

There have also been concerns regarding how people's identities, experiences, and bodies can be capitalised on (Vergès, 2021). For example, Bilge has criticised the fact that the popularity of the term intersectionality allowed a neoliberalisation of the term. Organisations and individuals can use it to "accumulate value through good public relations and "rebranding" without the need to actually address the underlying structures that produce and sustain injustice" (Bilge, 2013). In that sense, capitalism goes hand in hand with colonialism in its mission to colonise countries, markets, bodies, and minds (Vergès, 2021).

Power differentials in knowledge production

In the "Situated Knowledge" section, we discussed how all thoughts and observations are a reflection of the interests and positionality of their creator (Collins, 1989; D'Ignazio et al., 2020; Haraway, 1988) and how the myth of objectivity can present 'facts' as neutral while hiding the unmarked, the assumed, the biased positions that led to it (Haraway, 1988). That also extends to knowledge production.

"Inequalities of opportunity and recognition tied to structures of race, class, and gender remain, questions of provenance also remain central to the politics of knowledge production" (Lewis, 2013, p. 872).

Black feminists have pointed out that the gatekeepers of what is published and discussed in academia have often been white middle-class feminists. By class and race privileges, they are the ones that have been able to progress through the educational system (Valentine, 2007).

"Redressing past subjugation generally requires little more than symbolic recognition, whereas redressing present subjugation entails power redistribution" (Bilge, 2013).

Being mindful about how academic knowledge has and continues to be structured, practical-based research that involves talking to other practitioners and working directly with people affected by those issues supports the incorporation of knowledge that has potentially been marginalised before (Bilge, 2013; Lykes & Hershberg, 2012). However, addressing ethical matters in how these collaborations are done is extremely important. We will explain more about these tensions on trust between researchers and communities in the subchapters on Designing (for) participation and The culture and politics of hackathons.

In a 2013 paper, Bilge explains how Crenshaw said in a conference that she had learned more from what scholars and activists have done with intersectionality than what others have speculated about its appeal (Bilge, 2013). Bilge argues that the spread of meta-theoretical discussions about intersectionality distracts from its potential as a tool for social justice (ibid.). Sara Ortiz, a member of the Barcelona-based feminist urban planning collective, says that the collective is aware that living within a patriarchal society, they are likely that to reproduce discriminatory roles and stereotypes, and concludes that "consequently, it is essential for us to share experiences with other feminist activists and practitioners to expand our knowledge on feminist studies and practices, and continue reflecting on a daily basis with a critical spirit" (Ortiz Escalante & Gutiérrez Valdivia, 2015).

We have tried to remedy that risk by learning from our partner organisations and their work as much as possible. For example, we know from our partners at Ellos Deatnu and Snowchange Cooperative that there is a constant struggle for Sámi knowledge to be considered scientifically valid. In academia, peer reviews are usually used to validate written knowledge. However, this method fails to account for the knowledge passed by oral tradition —which is the case of the Sámi and many Indigenous communities (Mustonen, 2012). We will talk further about this topic in the project description of the Sámi allyship project.

Being aware of these differentials in knowledge production can support practitioners and researchers in any field (like urban planning or design) to be more aware of whose knowledge and what perspectives they are basing their work on — and who might be missing from these discourses. Concepts like intersectionality or the matrix of domination can support us to be more specific regarding who has the power and who does not. In order to avoid contributing to the depoliticisation of the movement, it is encouraged to continue building relationships with people rather than reducing it only to a theoretical practice (Bilge, 2013).

3.1.4 Consciousness-Raising

One way to build these relationships has been through consciousness-raising. This was a vital element of the so-called second-wave feminism in the 1960s and 1970s. As expressed in the quote on the left from bell hooks' book *Feminism is for Everybody*, thousands of women across the United States started to look inwards to face and challenge their own internalised sexism and their allegiance to the patriarchy (hooks, 2015). Consciousness-raising groups also made it to Scandinavia — e.g. Denmark (basisgruppe) and Sweden (basgrupp).

"Before women could change patriarchy, we had to change ourselves; we had to raise our consciousness"
(hooks, 2015, p. 7)

Consciousness-raising groups were structured to bring together five to twelve women in an informal setting, often at home or at a women's centre, and each week a new topic was discussed in the group. The idea is that each woman should explain how she herself experienced the week's topic in her daily life. Several guides were circulated to help new groups start their process of consciousness-raising. One of the guides, published by The Chicago Women's Liberation Union, suggested prompting the conversation with questions such as:

- How do you feel men see you?
- What does "femininity" mean to you in terms of your own life?
- How do you feel about menstruation?
- What hopes do you have for your daughter? For your son? Are these hopes different? If so, why?
- What is the basis of love between a woman and a man? Between a woman and a woman? Between parent and child?

While these prompting questions from The Chicago Women's Liberation Union undoubtedly provided food for thought, they completely omitted aspects of race and essentially avoided a whole host of intersectional problems. The following prompting questions are from the "Consciousness-Raising Guidelines" published by the Women's Action Alliance in 1975.

- What were my early expectations of men and women?
- Did I equate love and sex?
- When was I first aware of racial differences? How were they explained to me?
- Was I ever in the homes of people of other races? How did I learn racial stereotypes?
- Can I be happy alone?
- Whom do I have power over now – partner, co-workers, children, peers? How do I exercise that power (Kaba et al., 2017)?

When viewed as a historical document, these guidelines and questions offer a window into second-wave (white) feminist organising (Kaba et al., 2017). In addition to these questions, in the 2017 reprint of the Consciousness-Raising Guidelines, Black feminist Lori Sharpe offers a list of supplemented guidelines/questions for Black women, including:

- What are my feelings about myself as a Black child, girl, woman?
- What is my relationship to the Black world? The White world?
- Has formal schooling given me inferiority/superiority feelings?
- Do I see myself as part of the current renaissance of Black Culture? What is power and autonomy for me?

While the guidelines from The Chicago Women's Liberation Union pointed the focus mainly inward towards the self, the Women's Action Alliance guidelines expanded that view to include the community. About Lori Sharpe's additions to the guidelines, Jacqui Shine writes that they "are remarkable because they assert a model of [consciousness-raising] that is more expansive, more rigorous and, most powerfully, more communal in its orientation than anything white radical feminists might have envisioned" (Kaba et al., 2017).

Figure 3.5: 'Silenced Voices of Everyday Sheroes', by Samanta Tello (2016)

The purpose of these discussions was not to agree on everything or to come to some uniform decision, but rather to start to understand the systemic nature of the experiences and understand that indeed "the personal is political", as activist Carol Hanisch wrote in her 1970 essay (D'Ignazio et al., 2020). Furthermore, hooks explains

how the women were able to find a standpoint on gender exploitation and oppression through these discussions and disagreements. She defines consciousness-raising as "a constant change of heart" (hooks, 2015).

However, more so than just being about raising awareness, these groups were also about action. For example, the Chicago Women's Liberation Union's guidelines from 1971 explain how "consciousness-raising really depends on participation" and that "sisterhood doesn't come from just listening". The true task was to connect the individual experiences to political forces and "leverage new understanding to build solidarity across differences and toward political action" (D'Ignazio et al., 2020, p. 3).

3.1.5 Feminism in Academia

According to feminist scholars, the feminist movement in the United States started gaining momentum when it found its way into academia. This shift from activism to academia in many ways legitimised the knowledge shared amongst especially women for many years prior. Students could now study feminist theory, and scholars could advance the concepts even further through their academic explorations (hooks, 2015).

However, as usually happens when a field is academicised, new challenges materialised: "Suddenly the feminist thinking that had emerged directly from theory and practice received less attention than theory that was metalinguistic, creating exclusive jargon; it was written solely for an academic audience" (hooks, 2015, p. 22). Intentionally or unintentionally, many feminist thinkers started writing theory in a language so far removed from its activist roots that only fellow academics could fully understand it. This shift meant that while the work being produced was still visionary, it did not reach the masses the same way that the feminist movement had done previously. Apart from the apparent power differential inherent in the American class system, there were aspects of race, ability, gender identity and other elements of identity at play here, which determines who could attend university and, as such, contribute to the conversation. With the shift to academia, mainly upper-class white women declared ownership of the movement, "placing working-class white women, poor white women, and all women of color in the position of followers" (hooks, 2015, p. 44).

** Feminism: The belief in and advocacy of the political, economic, and social equality of the sexes (D'Ignazio & Klein, 2020; Merriam-Webster, n.d.-a)*

The issue with all this is that while feminism, by definition*, is for everyone (D'Ignazio & Klein, 2020; hooks, 2015; Merriam-Webster, n.d.-a), the language of academia is by no means accessible to everyone. Another issue is that academia has an ongoing history of excluding Indigenous knowledge. Sections 3.1.1 and 3.1.3 presented how power imbalances have historically allowed the most privileged groups in society to be the ones contributing to academic knowledge (Bilge, 2013; Lewis, 2013; Valentine, 2007) and how knowledge reflects the interest of their creators (Collins, 1989; D'Ignazio et al., 2020; Haraway, 1988). Consequently, the multiple and structural oppression exerted on Indigenous communities by colonial governments make it crucial to understand and challenge capitalist and imperialist notions of epistemology. Finally, sections 4.4.3 and 4.4.4 will present further insights on the relationship between Indigenous knowledge and academia, focusing on the Sámi communities in Finland.

In addition to this, academia, as an institution historically dominated by white men in both North America and Europe, is less likely to produce research that challenges notions of Black and female inferiority "because both the kinds of questions that could be asked and the explanations that would be found satisfying would necessarily reflect a basic lack of familiarity with Black women's reality" (Collins, 1989, p. 152). In essence, it is about who has the power to determine what is worth investing time, money, and resources in. We will return to this in the section on data feminism.

We, therefore, acknowledge that while this thesis is written for academia, and the benefits of the academisation of feminism are plenty, it can be argued that this format is an inherently un-feminist form of knowledge-making.

3.1.6 Data as a Feminist Issue

There are multiple definitions of the word *data* that connect information and facts to decision-making. For example, let us consider the two following definitions from the Oxford and Cambridge Dictionary.

"Facts or information, especially when examined and used to find out things or to make decisions" (Oxford Dictionary, 2020).

"Information, especially facts or numbers, collected to be examined and considered and used to help decision-making, or information in an electronic form that can be stored and used by a computer (Cambridge Dictionary, 2019).

Data is often perceived as neutral and objective (Criado-Perez, 2019; D'Ignazio & Klein, 2020). However, as we discussed in section 3.1.1, the illusion of objectivity affects what and how knowledge is produced and, consequently, what type of data practices we develop to deal with that knowledge. Thus, a turning point for us was realising that data and the structures around its collection and interpretation might not be as straightforward or objective as they seem to be. This realisation helped us expand our understanding of what types of issues could be approached through the feminist lens of challenging power differentials.

In recent years, an increasing number of scholars, researchers, and activists have expressed the urgency of challenging the contexts and practices that lead to data production. For example, mathematician and data scientist Cathy O'Neil has illustrated how big data perpetuates social oppression due to sexist, racist, and classist biases in data science (O'Neil, 2016). Journalist Caroline Criado-Perez has researched how systemic gaps in data collection and bias in data interpretation harm different life aspects of women and girls. The work of these people pushed us to be more critical and challenge power hierarchies and imbalances in the things that we have always considered neutral (Criado-Perez, 2019).

Although data is an outcome in the form of information, that outcome is so heavily influenced by the decisions behind, that it is not possible to separate data from its context. Consequently, in this thesis, we refer to data with the consideration that the contexts and practices that led to data production matter as much, if not more, than the data itself.

The academisation of feminism has enabled a more rigorous study of its relation to data collection processes. Starting from the foundational understanding that all knowledge is situated (Haraway, 1988) and that it reflects the interests of its creators (D'Ignazio & Klein, 2020), applying a feminist perspective to data science has become one of the most urgent issues to tackle, especially amidst the digitalisation of services and societies.

The following section presents an overview of the work and views of different authors and scholars on the need for and tools to transition towards equitable data collection practices.

***Invisible Women* (2019)**

In 2019, Caroline Criado-Perez published a book called I*nvisible Women: Exposing data bias in a world designed for men*. In her book, Criado-Perez resents the concept of

the "Reference Man", a Caucasian man, aged twenty-five to thirty, who weighs 70kg, and whose superpower is "being able to represent humanity as a whole" (Criado-Perez, 2019, p. 107). It could be argued that Criado-Perez's Reference Man is the personification of what Haraway presented in 1988 as the "unmarked", the default and dominant (Haraway, 1988).

Criado-Perez presents two significant concepts in her book: the male bias and the gender data gap. She describes the male bias as the tendency to put men's characteristics, needs, and behaviours as default. As a result, she illustrates, we are left with a vast gender data gap: most of the data we have in the world is based on the male body and behaviours (Criado-Perez, 2019). It is both a "cause and consequence of the type of unthinking that conceives of humanity as almost exclusively male" (ibid., p. 14).

The book exposes significant data biases and gaps in different fields, ranging from urban planning to health misdiagnoses. She argues that the three main patterns behind those cases come from the failure to account for the female body, women's unpaid care burden, and male violence against women (Criado-Perez, 2019).

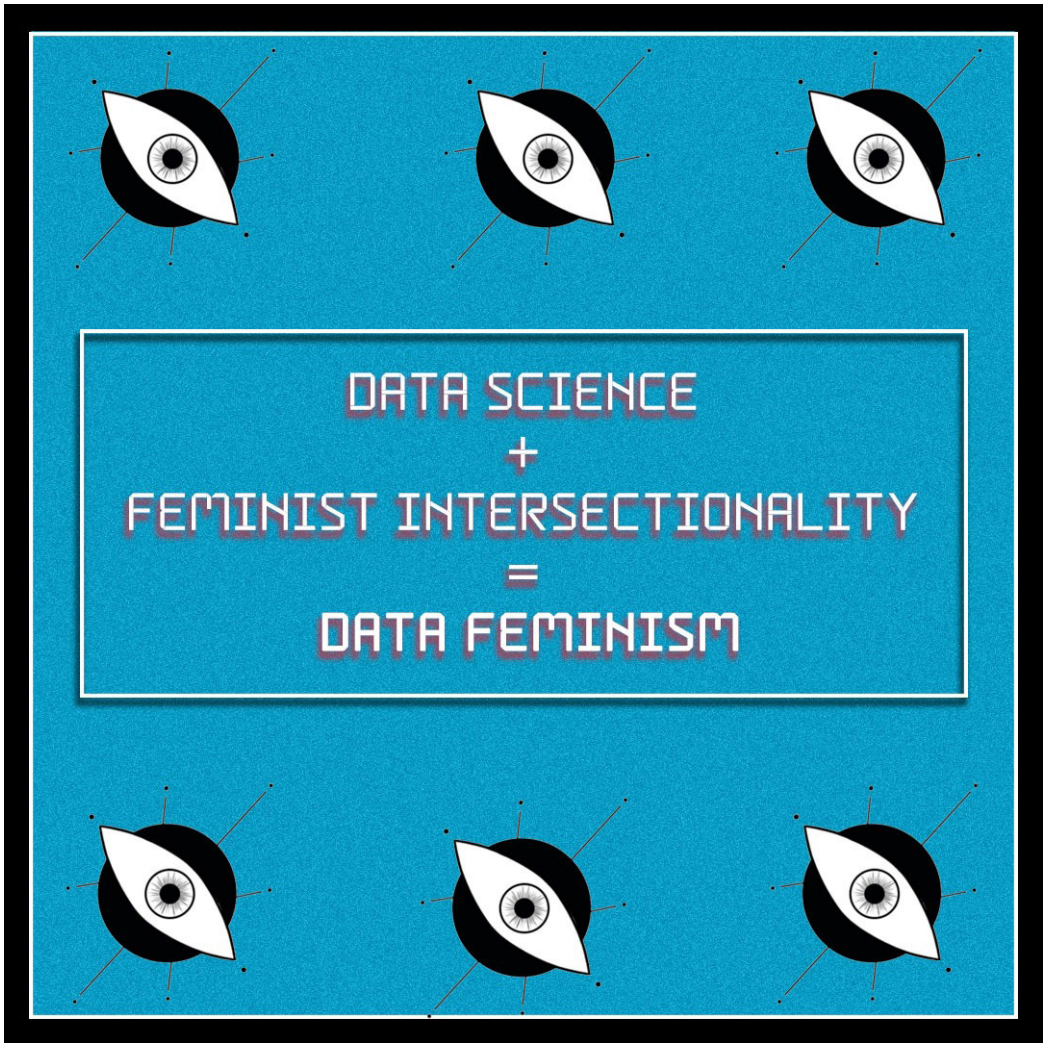


Figure 3.6: 'Data Feminism', by Deep Dives (2020).

***Data Feminism* (2020)**

"*Data feminism* is about power, about who has it and who doesn't, and about how those differentials of power can be challenged and changed using data" (D'Ignazio & Klein, 2020).

To analyse and challenge power differentials around data, Catherine D'Ignazio and Lauren F. Klein base their understanding on Black feminist thought, Disability activism,

and antiracism to develop principles to account for those struggles and agendas in data science. Those values and approaches include, but are not limited to, the illusion of objectivity, situated knowledge, intersectionality, epistemic violence, and decoloniality.

Beyond data science, analysing and challenging the power differentials around data is a tool and a feminist practice that can support designing, undertaking, and evaluating projects that deal with people's realities.

The authors suggest that to understand what intersecting privileges and power imbalances are behind our data practices and data products, we should ask what they refer to as "who-questions". In the context of data, these questions can sound like *"who is doing the work of data science (and who is not)? Whose goals are prioritised in data science (and whose are not)? And who benefits from data science (and who is either overlooked or actively harmed)?"* (D'Ignazio & Klein, 2020). These who-questions are not a new practice, but they are a valuable tool to challenge power at its source.

In that sense, the practice of being critical and questioning who benefits and who is harmed by current practices can help walk the next steps toward more equitable ones. In other words, data feminism teaches us that asking the wrong questions (or not asking questions at all) leads to getting incomplete or even incorrect data. As D'Ignazio and Klein explain in an interview, "it's not only about having great data, it's also thinking about how having good data helps us design informed policies that acknowledge sexism and racism" (Data2X, 2020).

The authors suggest a set of seven principles to challenge and change current data practices. These are (1) examine power, (2) challenge power, (3) elevate emotion and embodiment, (4) rethink binaries and hierarchies, (5) embrace pluralism, (6) consider context, (7) make labor visible. Although it is beyond the scope of this thesis to illustrate every principle, examples and concepts about the principles appear in other chapters throughout the thesis.

In *Data Feminism*, D'Ignazio and Klein illustrate the importance of our language and its impact in moving from data ethics to data justice. In the following table, they illustrate how changing words like "bias" to "oppression", "transparency" to "reflexivity", or "accountability" to "co-liberation" can help us challenge power rather than securing it. We believe that the following words can benefit data science and other fields using these concepts to refer to power.

From Data *Ethics* to Data *Justice*
(D'Ignazio & Klein, 2020, based on Collins, 2000)

Concepts That Secure Power Because they locate the source of the problem in individuals or technical systems	Concepts That Challenge Power Because they acknowledge structural power differentials and work toward dismantling them
Ethics	Justice
Bias	Oppression
Fairness	Equity
Accountability	Co-liberation
Transparency	Reflexivity
Understanding algorithms	Understanding history, culture, and context

Figure 3.7: 'From data ethics to data justice', by D'Ignazio and Klein (2020

3.1.7 Understanding Feminism in Finland

Now that we have a shared understanding of feminism and its relation to power, identity, academia, and data, let us zoom in on Finland. Much of the research conducted around feminist hackathons have taken place in the United States, and the hackathons have raised topics that were primarily material to the American context. For this reason, we believe it essential to establish a basic understanding of feminism in Finland in this literature review. We acknowledge that this overview will not cover all facets and perspectives of Finnish feminist history, but we hope it will help ground the context of the FFH hackathon.

As a result of first-wave feminism, women's suffrage was granted in Finland in 1906 as the first country in Europe (Forsås-Scott, 2021; THL, n.d.). However, it was not until the 1960s and 1970s that feminism really took off in the Nordics, with several consciousness-raising groups starting to influence policy and collaborate across borders. However, the effects of second-wave feminism were limited in Finland compared to the other Nordic countries (Forsås-Scott, 2021).

Inspired by the international feminist movement, women's studies began to appear in the academy towards the end of the 1970s. At the beginning of the 1980s, female scholars across many of the Finnish universities founded specific associations for women in academia (Tutkijanaisyhdistykset), and in 1988 the national association of Women's studies SUNS (Suomen Naistutkimuksen Seura/Sällskapet för kvinnoforskning i Finland) was founded (Rantalaiho et al., 2002). Up until the late 1990s, research within the field of women's studies focused mainly on women's daily lives, including education, childcare, and employment. In the early 2000s, however, many of the *Centres for Women's Studies* became *Centres for Gender Studies*. In addition, they developed a greater emphasis on research regarding the body, identity, masculinity, and queer studies (Forsås-Scott, 2021) — a sort of infancy of intersectionality.

However, fast forward to 2021, and it is still evident that while conversations about intersectionality and antiracism have indeed been happening in different pockets of Finnish society for many years, it has only really reached the surface in the last few years. There has been a significant increase in the public debate in the time following the June 2020 Black Lives Matter global uprising. However, as PhD and Research Manager at THL, Shadia Rask wrote in her column "Muista välil hengittää" (Remember to breathe occasionally) in the feminist publication Tulva*: "We have been talking about this for years!". She adds: "Increased awareness does not automatically translate into cross-cutting consideration, i.e., enter the mainstream". She calls for a deeper focus on antiracism, inclusion, and intersectionality in public discourse for those considerations to reach the same level of importance as gender has (Rask, 2021). In the column, Rask also speaks to the exhaustion that comes from prolonged activist work, which is a topic multiple teams touched on during the hackathon.

In her thesis "Intersectionality in Finnish Policy: Examining Equality and Non-Discrimination in Finnish Municipalities", Josefina Kuusikallio explains that intersectionality has not been studied systematically in the context of policy in Finland (Kuusikallio, 2021), something that Borchorst and Teigen (2010), in part, explain with the relatively late development of ethnic diversity. The struggles which were previously focused on across the Nordics were instead related to gender and class.

Intersectionality and intersectional feminism are, however, very present in social activism in Finland. Grassroots organisations, companies and communities such as Fem-R, Ruskeat Tyttöt (Brown Girls), UrbanApa, FEMMA Planning, and ARMA (Anti-Racist Media Activist Alliance) all have intersectional feminist values as part of their core mission and work.

** Tulva is a publication by the feminist organisation Naisasioliitto Unioni which aims to provide a platform for diverse and topical conversations related to society, culture and politics – all through an intersectional feminist and anti-racist lens (Tulva, n.d.). Its most recent issue covered topics such as sex education, antiracism, rape culture, and the Sámi struggle for existence (through a film review of the recently published documentary by Sámi filmmaker Suvi West Eatnameamet).*

Intersectional feminism has also received increasingly more political attention in recent years. For example, in 2016, the Finnish Feminist Party was established, and with it came a political program that "critically examines multiple discriminating power structures such as racism, sexism and classism in the Finnish society", as well as "questions the narrative of a homogeneous and coherent Finnish nation, or 'a common-place', by turning it into a narrative of 'multiplaceness'" (Ilmonen & Rossi, 2019; Kuusikallio, 2021).

In 2020 the word intersectionality was applied in the equality program of the Finnish government for the first time in history (Ministry of Social Affairs and Health, 2020). This move resulted in heavy debates and attacks, mainly by right-wing conservatives, on the Finnish PM Sanna Marin and the rest of the female-led government (Brunila & Rossi, 2020). The debate focused, in part, on the meaning and translation of the word *intersectional*. There is no general consensus on a Finnish translation. It is often compared to and viewed in parallel with the term *moniperusteinen syrjintä* (multiple discrimination), which is a more common term in Finnish policy. However, according to Kuusikallio's analysis, people still understand and relate to the terms in very different ways (Kuusikallio, 2021).

The equality program is progressive and defines intersectionality as an understanding of the many factors, besides gender, that contribute to a person's positionality in society (Kuusikallio, 2021). These factors include family background, level of education, age, disability status, sexual orientation, socioeconomic background, place of residence, gender identity, and gender expression. However, even though the program's aspirations are progressive, it still lacks guidelines for practical implementation (ibid.).

Figure 3.8: 'Circle of Privilege: Finnish job market edition', by Paola Elefante (2021)

While Finland is often considered a progressive, perhaps even feminist nation, there is still a long way to go in implementing intersectional feminist policies. Gender equality in the Nordic countries is generally considered advanced, yet it has also been criticised for being one-dimensional (Kantola et al., 2012). It is, for example, only ten years ago, in 2011, that "transvestism" was eliminated from the classification "diseases" in Finland (THL, n.d.). In addition, under current law, Finland requires enforced sterilisation of transgender people following gender-confirming surgery — a practice denounced as torture by the UN (Kudel, 2021). In addition, the government's equality program has no mention of racism in connection with feminism, a critical perspective to include, as Finnish Feminist Party leader Katju Aro notes, because "different women face different issues" (ibid.).

The figure on the previous page does a great job of illustrating the different levels of power and privilege in the Finnish job market, highlighting the hierarchy within areas of physical appearance, language abilities, migration status, and even names (among others).

In addition to the eight categories illustrated in figure 3.8, we would add gender — especially in senior and leadership positions, network — something events like hackathons can actually help with, and age — as categories that are likely to affect a person's level of privilege on the Finnish job market.

When it comes to women's safety, Finland also still has deeply rooted issues. According to a survey on violence against women by the European Union Agency for Fundamental Rights, Finland is the EU's second most violent country for women (European Union Agency for Fundamental Rights, 2015; Kudel, 2021)*. Rates of physical abuse and intimate partner killings rank among the highest in Europe, and the COVID-19 pandemic has only exacerbated domestic violence, reports the Finnish Institute for Health and Welfare. According to Johanna Kantola, gender studies professor at Tampere University, "a high existing level of gender equality ironically fosters the illusion that specific anti-violence policies are superfluous" (Kudel, 2021).

** With our current understanding of the complex and often biased nature of data collection, this fact, of course, raises many questions about how this was measured, by whom, and more — but the result is still quite significant.*

3.1.8 Co-Liberation

The previous sections have illustrated how dismantling power structures is for everybody (hooks, 2015) and benefits us all. For that, feminist researchers, scholars, and practitioners call for building collaborative partnerships, described and imagined as including many voices and experiences, being anti-oppressive, based on solidarity, commitment, shared goals and a belief in mutual benefit (Bilge, 2013; D'Ignazio & Klein, 2020; hooks, 2015). Within these relationships, we can collectively imagine futures with less domination, where we can envision multiple and even contradictory futures (Vergès, 2021). However, more importantly, we have to create spaces where we can ask the *who-questions*, confront those uncomfortable questions and topics, and, as Haraway puts it, "show up; stay with the trouble! Risk being wrong in order to become a vital "we" (Haraway, 2018).

Section 3.1.3 presented how awareness of power differentials in knowledge production is vital to consider whose voices and experiences might be missing from the normative discourses. To facilitate this, we need structures that can incentivise this type of co-liberating partnerships. Areas of investigation include how universities might play a role in challenging harmful research dynamics and build mutually benefiting relationships that can support communities outside academia and nourish more ethical and equitable research.

Another example of how external structures might limit this cooperation for co-liberation is *funding*. In the weeks before the hackathon, we had the chance to talk

"Starting from the assumption that oppression is the problem, equity is the path, and co-liberation is the desired goal leads to fundamentally different projects that challenge power at their source"
(D'Ignazio & Klein, 2020, p. 63)

to some of the community-based organisations in Helsinki. In our conversations, we learned that getting funding to secure their work is a constant struggle. The projects they work in are often dependent on grants for culture and arts — where they often have to compete with other cultural organisations to get chosen. Under these conditions, the freedom to engage in co-liberating projects is too connected and dependent on the donor's vision, timings, and requirements to be liberative at all.

The issue of funding is not specific to Finland and seems to be shared among organisations that work with community issues; these organizations often find their work valued in principle but not economically (Berglund, 2007). As feminist geographer Gill Valentine puts it, "to win more funding or secure a more powerful political position, each group [experiencing oppression] is under pressure to focus research on its dominant category and to demonstrate that that category is more oppressed than other strands" (Valentine, 2007).

It is beyond the scope of this thesis to study how capitalist and neoliberal dynamics hinder the work that can be done in social justice — and there are no quick solutions that might fix that. However, within each actor's framework, we might find forms of collaboration that let us engage better, challenging the power at its source, one project at a time.

3.1.9 Recap

In this chapter, we have explored different concepts around feminism(s): the matrix of domination, intersectional feminism, depoliticisation, who-questions, legitimacy of knowledge, feminism in data and academia, and finally, a note on the situation of feminism(s) in Finland and possible paths for co-liberation. These concepts can now serve as frameworks and guidelines to support a more socially engaged and critical lens when we approach the following topics covered in the literature review: (1) real estate, land use and urban planning, (2) designing (for) participation, and (3) hackathons.

Although the fields are different, we argue that the challenges that prevent feminism from being intersectional and equitable are the same challenges other fields face. Those fields can vary a lot from each other on the surface — like real estate and hackathons — but they share similarities because they are still systems made by people, for people, subject to the power dynamics in the matrix of domination.

We believe that the value of being aware of what depoliticises feminism(s) and separates them from their initial struggles can help us ask the questions that will allow us to identify what the topics we want to address are when we talk about issues that revolve around equity: social sustainability, diversity, inclusion, and participation.

3.2 Real Estate, Land Use & Urban Planning

The real estate sector connects in many ways to everyday life, and its role in sustainable change is significant. However, it is essential to acknowledge that institutions with influence on land use policy, real estate investment, and urban planning often compromise sustainability goals. This chapter looks at contrasting views of value around the real estate sector and how they were addressed in the hackathon.

The real estate sector also plays a key role financially, as significant amounts of private and public wealth are connected to real estate (Toivonen & Viitanen, 2015). A report from the World Economic Forum estimated that as an investment asset, real estate accounted for 10 per cent of global GDP (World Economic Forum, 2021). The fact that there is so much wealth in the built environment also means that real estate investments carry significant weight in global financial markets.

This chapter, therefore, starts with private and commercial real estate and perspectives on value and evaluation. The second section looks at public sector real estate and how current privatisation trends are felt in Helsinki. It will finally explore feminist perspectives, values and practices in the built environment.

3.2.1 Private and Commercial Real Estate

In Finland, It is estimated that more than 70 per cent of Finland's national wealth is connected to the built environment (Rakennusteollisuus, 2021). The size of the Finnish real estate investment market as a percentage of GDP is among the biggest in the EU (Bank of Finland, 2018). In 2018, for example, it was estimated that the value of the real estate investment market accounted for 28 per cent of the national GDP (ibid.). Put another way; considerable resources are allocated in the real estate sector due to its capacity to generate value. So what does *value* mean in real estate? To answer that question, it is first needed to explain how value is measured in commercial real estate operations. We will take real estate investment as an example.

How is value measured in the real estate investment field?

For commercial real estate investments, value is fundamentally related to returns and investment performance, which consists of (a) income or property returns and/or (b) capital growth (or appreciation)* (Geltner & Miller, 2001). Here, good investment performance is considered when the real estate asset generates returns, either by creating economic profit during the investment, or when the value at the end of the investment period is higher than the initial investment cost (ibid.).

** Appreciation refers to an increase in the value of a real estate asset over time. Depreciation, on the contrary, means that the real estate asset decreases in value over time.*

Income or property returns refer to the stable income returns in the form of long rent contracts, which are, at the same time, also often considered as an inflation hedge (Geltner & Miller, 2001). Inflation hedges are investments designed to protect investors against the decreased value of their assets due to inflation. Here, protection means minimising the risk that the investor loses money. For example, in Finland, rents are tied to an index, so it would be expected that the asset's value depreciates (loses commercial value) at a slower rate than the value of the currency. However, in the scope of the OECD countries, only 13 out of the 38 impose some form of rent control on the initial level rent (OECD, 2021).

Capital growth (or appreciation) is the increase or decrease in the real estate's value over time (Geltner & Miller, 2001). Depreciation, on the contrary, means that the real estate asset decreases in value over time. For real estate investments, a common way to define value is by saying that it is the expected difference between the buy and sell price. However, that figure tends to be only an estimation, as the true appreciation is only seen once/if the asset is sold, but forecasting the capital growth is needed to decide whether to invest or not in an asset (ibid.)

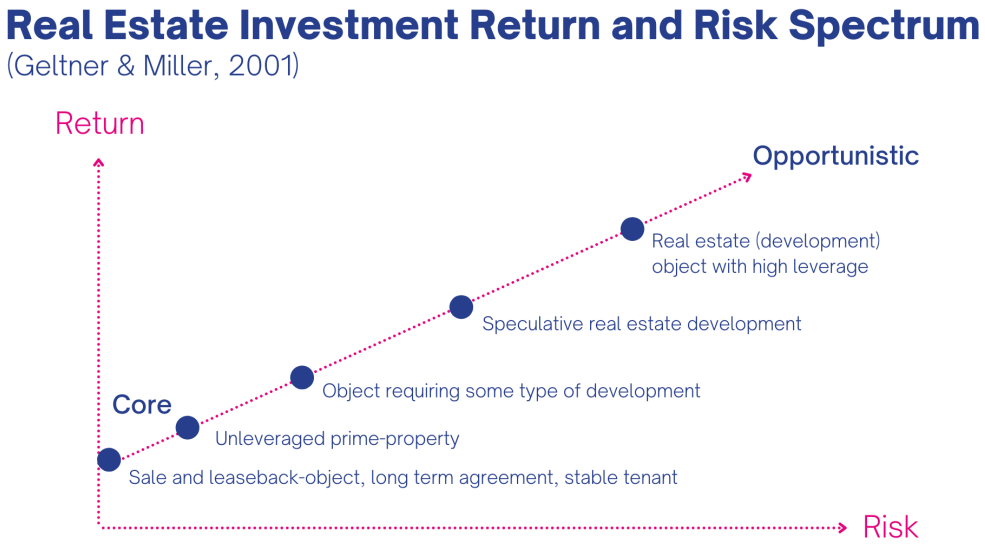


Figure 3.9: 'Real Estate Investment Return and Risk Spectrum', by Geltner & Miller (2001)

"Investors are assumed to be risk averse They need to be compensated for taking additional risk" (Geltner & Miller, 2001).

This indicates that the value in the real estate field is strongly driven by data estimating monetary return. But, where do investors find that data? It appears that there is not one central place for trading real estate (Bank of Finland, 2018; Geltner & Miller, 2001), so investors rely on valuation based indices that represent market "average" properties (Geltner & Miller, 2001). Therefore, when an investor wants to calculate, estimate, or guess their return index, they have to look at properties in the market similar to theirs. For example, this would mean looking for properties of a similar type, geography, age or stage of life, and then seeing what the generated value (income) is. Put in another way, it all depends on the sector and the situation. There is no exact way to know the asset's value or the income generated by that asset during the investment life. Consequently, investors have to estimate it by comparing it to similar properties that have reported their value, and there is no central place to trade assets or see all the reports from all the real estate types.

These problems are increasingly widespread, and they often create political problems at the local level. For instance, In addition to this, UN Special Rapporteur on the right to adequate housing, Leilani Farha, reported in 2017 that, because of the global financial crisis in 2008, corporate finance (banks, hedge funds, private equity companies, insurance and pension funds) and other financial intermediaries with large quantities of capital and excess liquidity have completely transformed housing and real estate markets (UN General Assembly, 2017). She argues that housing and commercial real estate "have become the 'commodity of choice' for corporate finance and the pace at which financial corporations and funds are taking over housing and real estate in many cities is staggering. The value of global real estate is about US$ 217 trillion, nearly 60 percent of the value of all global assets" (ibid.)

To summarise, the decision behind real estate investment is heavily based on (quantitative) calculations. Calculations of investment profitability during and/or at the end of the investment cycle are based on estimations. The estimations are based on comparisons against decentralised "average" market indices. The indices cannot be found in one single place and are affected by a multitude of variables. In addition, and particularly since the global financial crisis in 2008, those variables are simultaneously affected by another multitude of variables whose impact, to our knowledge, cannot be fully forecasted, as they are at the same time dependent on global corporate finance dynamics.

As revealed, all mechanisms to measure value in the real estate industry are based on economic performance. Going back to our initial question on how value is perceived, we can therefore consider the answer to be: economic profit and growth.

Indeed, the World Economic Forum reports that the last decade has brought unprecedented growth in both the value and the rise of investment in the real estate sector (World Economic Forum, 2021). Consequently, they also estimate that this growth has come with several challenges, including fragmented regulatory frameworks, high carbon emissions, a severe lack of affordable housing, lack of transparency, and low resilience (ibid. p. 6). Following feminist thought and practice, we must then ask ourselves: *Who is facing these challenges?*

If we take "lack of affordable housing" as an example, it is clear that the challenge is faced by the communities who are harassed, displaced, evicted, and gentrified. Trading housing as a commodity (instead of a human right), on the other hand, has resulted in a lucrative practice the global real estate sector has also benefited from (UN General Assembly, 2017).

"Issues related to business and human rights have received some attention in recent years. However, the housing and real estate sector – the largest business sector with many of the most serious impacts on human rights – appears to have been mostly ignored"
UN Special Rapporteur on adequate housing Leilani Farha (UN General Assembly, 2017)

Another trend impacting the real estate sector is climate change. While it is evident that it poses a challenge to the survival of the human species, a PwC 2020 study reported how over two-thirds of real estate actors that participated in the study were concerned about the business impacts that the environmental issues would bring (PwC, 2020). This quote from a real estate company CEO illustrates how climate change is viewed as a challenge from a cost perspective.

"It is impossible to dissociate politics from another critically important subject – the environment – which has, as one investment manager puts it, "moved to a different level of risk" since last year's report. Over two-thirds of survey respondents are concerned about the impact of environmental issues on their business in 2020. "We have talked about climate change for some time, but the risk has become more severe," says a German CEO. "It affects how you build, how sustainably you build. What is your energy cost?" (PwC, 2020).

The influences affecting the commercial real estate market are the same forces affecting the surrounding world (Toivonen & Viitanen, 2015). However, because of how value is understood — economic profit — these megatrends, often framed as responses to global challenges, do not mean the real estate market has to solve those problems. It rather means that the real estate market has to be profitable despite all the added difficulties (such as increased regulation, increased costs, increased competition). However, for those affected by these trends, the difficulty lies in maintaining livelihoods despite those challenges.

Under a neoliberal framework, *there are no real incentives for sustainability beyond profit.* A study conducted by built environment researcher Anahita Rashidfarokhi showed how the two primary motivations for private Finnish real estate companies to engage with sustainability reporting were triggered by (1) more strict regulations and policies, and (2) financial impacts that could affect their business performance (Rashidfarokhi, 2019). The same study pointed out that most companies reported outcomes, in the form of quantitative indicators, instead of processes and failed to account for the intangible aspects and interconnections between sustainability beyond the environmental dimension (ibid.)

3.2.2 Public Real Estate

Through the example of investment, the previous section revealed how the private real estate sector's way of understanding value and responding to global trends does not necessarily support communities affected by those same trends. Is it the same with public real estate? In Finland, a large amount of land is owned by municipalities and cities (Hyötyläinen & Haila, 2018). That has been considered to help cities ensure a heterogeneous urban fabric and a socially sustainable built environment by prioritising public agendas over private agendas (ibid.).

Historically, public land had been used for schools, libraries or other public services administratively free of charge and conveyed through leasing (Hyötyläinen & Haila, 2018). However, since Finland's recession in the 1990s, cities have also begun selling their land. A key concern for public real estate entrepreneurs, supported by politicians, has been the amount of money tied up in public assets. Because of that, there has been a trend to privatise municipal real estate on the grounds that it generates revenue for the city, and charging market rent is said to make real estate usage more "efficient." (ibid.). This has led to cities following neoliberal real estate policies that apply a market logic to the use of public land (ibid, p. 1).

One example of this is the privatisation of public real estate in Eiranranta, Helsinki. A private real estate company bought public land from the city, fenced the area, and built expensive apartments for high-net-worth individuals. This has been considered concerning as it "introduces a new type of development to Helsinki that has so far been absent in a Northern welfare city" (Hyötyläinen & Haila, 2018, p. 1).

The Lapinlahti area in Helsinki is another example of this duality of public-owned land and private investment. The Lapinlahti area, a former mental health hospital in Helsinki (Finland), has also experienced similar struggles since the 1990s. In 2019-2020, the City of Helsinki organised a competition for the development of the area (Hautajärvi et al., 2021). The goal was to sell some of the buildings of Lapinlahti to private real estate developers, who would then be responsible for the renovation and activities. NREP, a private real estate company, won the competition with a proposal to build two five-story residential buildings and a five-story hotel over 100 feet long. However, due to the strong mobilisation of civil society as well as the opposition from experts, the sale never took place (ibid.) Now, Lapinlahti continues to be a place for arts, culture and well-being. In section 4.5, we will explore this case further, as it was one of the projects of the FFH hackathon.

This trend is expected to grow in the upcoming years, as investors get increasingly attracted by public use properties (KTI, 2018), but this is not a situation distinct to Finland. Similar issues have been reported by the Women Design Service in London (Berglund, 2007) — it is an international situation. Even if the public sector is expected to protect the public interest better than the private sector, the evidence of cities increasingly following neoliberal real estate policies sometimes makes it difficult to distinguish between the private and the public case anymore.

3.2.3 Land Use Planning in Finland & Social Sustainability

In 2018, a group of researchers in the field of built environment wondered how social sustainability was reflected in land use planning processes in Finland (Rashidfarokhi et al., 2018). It seemed that even if the concept of *social sustainability* was familiar, a shared understanding of its meaning (ibid., p. 2) and ways to incorporate it in the land use planning process seemed to be missing (ibid., p. 3). As a response to that, the researchers collected and analysed existing literature and assessment tools to identify the most relevant elements for social sustainability in the context of land use planning

(ibid., p. 7). They identified six general themes: (1) equity, (2) social inclusion, (3) social cohesion, (4) social capital, (5) community participation, and (6) safety (Rashidfarokhi, 2019, p. 13). These themes include inter and intra-generational equity, arts and culture, social mixing, civic engagement, civic networks, partnerships and collaborations. The rest of the elements can be seen in the table below.

Six general themes and the related social sustainability elements (Rashidfarokhi et al., 2018)

General themes	Social sustainability elements
1) Equity	Equal opportunities and access to resources; Inter and intra-generational equity; Gender equity; Equity for minorities and disadvantaged groups
2) Social inclusion	Diversity; Arts and culture; Social integration; Social mixing; Conflicts mitigation
3) Social cohesion	Community vitality; Active community organizations; Accessibility to institutions; Innovation and process; Citizen perception of government performance; Social solidarity; Civic engagement and volunteerism
4) Social capital	Social norms; Social values; Social/civic networks; Trust and optimism; Access to civic and public spaces
5) Community participation	Knowledge management; Community empowerment; Partnership and collaboration
6) Safety	Security; Freedom, Resilience

Figure 3.10: 'Six general themes and the related social sustainability elements', by Rashidfarokhi et al. (2018)

Next, these themes and their elements helped develop a social sustainability tool to clarify (1) what social sustainability means in the land use planning process and (2) how it can be achieved (Rashidfarokhi et al., 2018). In practice, the tool was first tested to study the master planning process and its legislation in the Finnish city of Lappeenranta. Sixteen documents regarding the master planning processes were analysed, including participation and assessment plans and memos between different groups in Lappeenranta. The research also included the analysis of the Land Use and Building Act (LUBA 132/1999) and the Land Use and Building Decree (LUBD 895/1999), which are the legal frameworks that guide land use planning processes in Finland (ibid, p. 13).

In theory, Finland's land use legislations have been developed in a way that recognises the right of participation and oblige planners to take into account dwellers needs (Mäntysalo et al., 2014; Rashidfarokhi et al., 2018). Previous studies had already warned that people's input in participatory planning in Finland is left to the interpretation of the planner (Faehnle et al., 2014). However, Rashidfarokhi's study demonstrated many barriers to achieve social sustainability even before reaching participatory activities. These are some of the examples of shortcomings presented in the study:

- "[The legislation] lacks instruments for promoting mutual understanding and a sense of community in public–private–people partnerships" (ibid, p. 17)
- "The municipality could not create bridges between itself and the interests groups" (ibid, p. 18)
- "There is no evidence of how the municipality considered the social and cultural values of the community during the process" (ibid, p. 18)

- "The municipality sent letters to some associations in order to receive their views on the plan, but it did not receive any feedback. This could be due to the inability of the municipality to create bridges between itself and the interest groups. According to our knowledge, the municipality has not established settings for continuous learning in the social environment" (ibid, p. 18)
- "We could not find any data on how the municipality monitored the level of safety [in participation] in the planning process. This might be because Finland is seen as one of the safest countries in the world" (ibid, p. 19)

The literature review indicated that community participation was the central element of social sustainability (Rashidfarokhi et al., 2018). However, the study results showed how planners failed to account for it due to a lack of skills and institutional motivations (ibid.). *How might planners build sustainably if their practices are so separated from network and community building?* As presented in the previous subchapter, Feminism(s), feminist practice and thought enable the sensitivity to recognise the origin of such shortcomings and give tools for action.

3.2.4 Who Are Cities Designed For? A Feminist Approach for the Built Environment

If there is a domain where systemic power differentials are made concrete, it is in the built environment with its local place-based contexts. Acknowledging that life in cities is easier for those who are non-disabled, young, wealthy, and typically white and male (Crenshaw, 1991; Criado-Perez, 2019; D'Ignazio & Klein, 2020; Kern, 2021; Valentine, 2007) is not only an equity debate. It is simply intellectually stronger to acknowledge situatedness (see Haraway, 1988) and recognise that the city is not experienced equally by everybody, so we can be open to the possibilities of doing things differently (Berglund, 2007).

Feminism interrogates power imbalances in inherently interdisciplinary ways, starting from concrete experiences and linking them to power structures. For this reason, feminist thought and practice have helped advance critical thinking in many different disciplines connected to the built environment, such as geography (see Valentine, 2007), planning (see Berglund, 2007; Horelli, 2013), or data science (see Criado-Perez, 2019; D'Ignazio & Klein, 2020; O'Neil, 2016). We are building on all these disciplines and transdisciplinary debates around them.

3.2.4.1 Overview of the Issues:

Who are cities designed for?

For a very long time, planners, architects, designers, anthropologists, and sociologists from many parts of the world have pointed out that urban design may appear to be neutral, but it is not.

We find many binaries in how cities are designed, which are often presented as opposites: paid/unpaid work, work/home, public/private, family/friends (Kern, 2021). As discussed in the fourth principle of *Data Feminism*, behind binaries, there are almost always hierarchies (D'Ignazio & Klein, 2020). Conditioned by deeply rooted gender stereotypes, societies have assigned the private space of the home to women and the public space to men (see Berglund, 2007; Criado-Perez, 2019; Horelli, 2013; Sweet & Ortiz Escalante, 2014).

"The feminist critique of the built environment that flourished from the 1970s showed how thoroughfares, shopping centres and homes both constrained and reproduced social roles and cultural expectations" (Berglund, 2007, p. 4).

** The term "mobility of care" was coined by Inés Sánchez de Madariaga, an internationally recognised expert on gender in research, architecture, planning and development from Spain.*

For example, because women globally undertake the majority of (unpaid) care work, they tend to make short and multiple journeys, called "trip-chains" (to childcare, school, work, and grocery shops) (Criado-Perez, 2019; Greed, 2005). These mobilities of care* are often overlooked by planning policy (Greed, 2005) and punished in systems where transportations structures are radial, and mobility by car is prioritised. By increasing the space and importance for cars, for instance, there is also less space for pedestrians (leading to increased problems of accessibility) (Criado-Perez, 2019).

Recently, the size of new apartments in Finland has also been a question of debate. A 2021 study by the Helsinki Institute of Urban and Regional Studies analysed the size of more than 4,000 apartments in 60 apartment buildings in five of the major cities in Finland. The research found that 40 per cent of the new apartments were smaller than 37m2, and 79 per cent of them were around a similar area size (Vaattovaara et al., 2021). In addition, researchers in the study criticised the lack of versatile usability and furnish-ability (ibid.). *This encourages us to think: Whom are these apartments designed for? Which ideas of family, or even community, are being prioritised? What other uses of space in the city are being prioritised?*

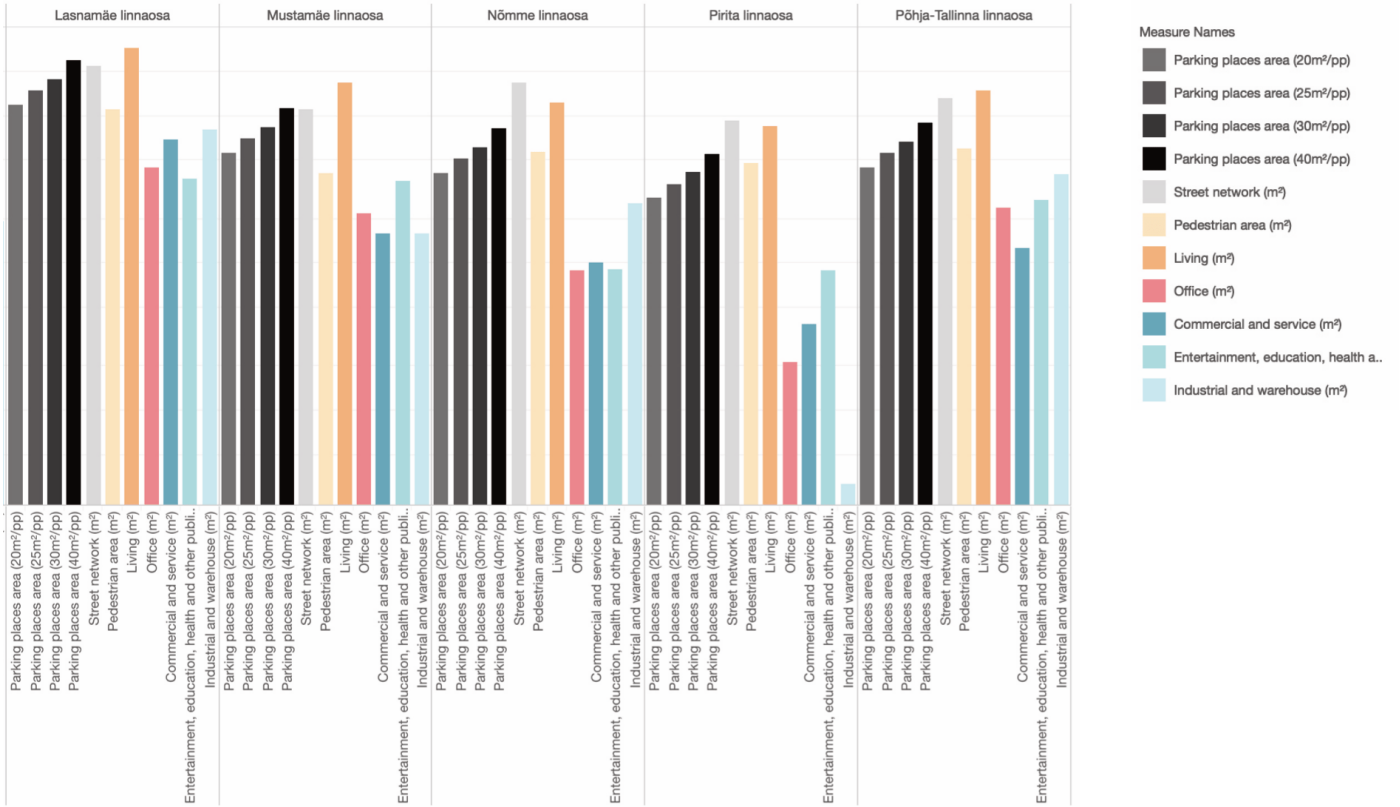


Figure 3.11: Visualisation of how much space cars take in the city of Tallinn, Estonia. "In nearly all districts in Tallinn, the land surface dedicated to cars doubles the total amount of residential space (all buildings' floors included)". Graphic and description by SPIN UNIT (2019).

Care mobility and transportation: A case example from Sweden

Transportation infrastructures are designed to accommodate the type of travel associated with typical male behaviour: a working-class man who works from nine to five and lives in the suburbs (Berglund, 2007; Criado-Perez, 2019). The fact that transportation infrastructures are radial in most of the cities facilitate the type of travel that is to go from anywhere in the city and surroundings to the centre (Criado-Perez, 2019).

In several towns in Sweden, it was identified that women represented the majority of injured pedestrians on roads in slippery or icy conditions. It was identified that the city cleared the snow from highways and bigger roads first, so "*the majority*" could go to work, and after that, they would clear smaller routes, pedestrian ways, and

areas close to public transportation stops (ibid.) The notion that the majority of the town used cars as a means to go to (paid) work in the morning and come back in the evening overlooked purposes of travelling that were not economically remunerated (such as unpaid work, clashing with gender) or means of transportation that were not cars (such as public transportation, or travel by foot, clashing with class). The city conducted an experiment and, only by changing the order in which roads were cleared, the accidents were reduced to half. In addition, it was estimated that the cost of assisting those injuries was estimated to be approximately three times higher than the road maintenance cost for the entire winter (ibid.)

There are many overarching issues when it comes to questions of who is prioritised in matters of the built environment. In the few examples provided above we can see how different traits of identities, abilities, and experiences can be compromised by homogeneous design. Feminist geographer Gill Valentine claims that spaces and identities are co-implicated, as "the identity of these spaces are in turn produced and stabilised through the repetition of the intersectional identities of the dominant groups that occupy them, (...) such that particular groups claim the right to these spaces" (Valentine, 2007, p. 19). In that sense, she argues that geography is in a key position to extend intersectionality to other spheres: It can pay attention to how spaces are related to subject formation and positions of power (ibid.).

3.2.5 Land Use and Indigenous Perspectives

Critical voices around land use are increasingly also taking decolonising perspectives. These are also regarded in feminist thought and practice as feminism works towards dismantling systemic oppression and Indigenous communities experience oppression at a structural level.

According to Sámi rights advocate Petra Laiti, the key to understanding any Indigenous dimensions should start with understanding Indigenous land use (Laiti, 2021). In the context of Finland, the main issues arise from (1) differences in the understanding of who are the right holders in land use and (2) differences in understanding culture as something compartmentalised vs something holistic

1. Differences in the understanding of who are the right holders in land use

From the perspective of non-Indigenous laws, there are three types of right holders; (1) local people (anyone who lives permanently in the area); (2) non-local people who own local property (property owners own rights through land ownership) and (3) visitors and tourists (who have different rights to local and property owners) (Laiti, 2021). Here, rights are bound to ownership (ibid).

However, Indigenous perspectives contemplate more categories and distinguish between (a) local natives, (b) non-local natives, (c) non-local native property owner, (d) visiting or returning native, (e) local non-native, (f) non-local non-native property owner, (e) tourists (Laiti, 2021). In this case, rights are bound to "a sense of duty and belonging, which you often inherit but can also reclaim" (ibid.).

2. Differences in understanding culture as something compartmentalised vs something holistic

According to Laiti, a compartmentalised perspective on how Indigenous people might use the land is also restricting. For example, a non-indigenous view of land use might consider these areas as separate: (1) livelihoods, (2) caretaking and monitoring, (3) spiritual customs, (4) teaching and learning, and (5) healing and traditional medicine (Laiti, 2021). However, under a holistic culture, these are impossible to separate. In her presentation in the FFH hackathon, Laiti illustrated this paradox with the following example: "When you fish, you thank the river for providing food, but you also check for

pollution, you keep an eye on the fish population, you learn the customs to be able to teach them to someone else" (ibid.).

Because land-use laws do not consider how these dimensions intertwine in Indigenous cultures, Sámi people struggle to survive despite the legal frameworks that exist for specific areas (Laiti, 2021). Indigenous perspectives show how the current land use legislation puts in danger the livelihoods of the Sámi communities as the right holder concepts and the land use concepts between Indigenous and non-Indigenous laws are fundamentally different. In her presentation, Laiti urged rethinking these laws from the perspective of *who is missing* and *who is not being mentioned,* and prompted the audience with the questions: "*How can we rethink existing structures to stop them from causing harm just by existing? What structures can we rethink, are some impossible to maintain?*" (ibid.). For example, New Zealand's parliament has passed a legislation that recognises that the collective right to livelihood of communities cannot be separated from giving legal protection and preservation to nature (Sawhney, 2020, p. 3). By declaring the sacred Te Awa Tupua river and its elements as indivisible, and giving it the same rights of a legal person, it is "gradually displacing historical distrust with reconciliation and cooperation (ibid.)"

3.2.6 Feminist Methods in Participatory Urban Planning

In urban planning, there is always a need to include new perspectives, and participatory work is a crucial method for doing this. In that regard, organisations like Women's Design Service (London), Col·lectiu Punt 6 (Barcelona), Center for Urban Pedagogy (New York City), and FEMMA Planning (Helsinki) have provided a large number of examples of projects and methods that can be conducted for more meaningful participatory planning.

"Any loss of institutional memory in the voluntary or non-governmental sectors will weaken its capacity to help alleviate the welfare crises that rumble on in the shadows of economic globalisation. Many small organisations find their work is valued in principle but not economically. Overstretched, they cannot afford to reinvent the wheel, just as they cannot afford to compete against each other for scarce resources." (Berglund, 2007).

In Barcelona, some collectives advocate for feminist urban planning practices to challenge the stereotype of female passivity and change the discourse from vulnerability to resistance (Pérez Rincón, 2017). Furthermore, feminist approaches in land use planning are considered crucial to resist gentrification. When spaces are considered more attractive and become subject of speculation, the first people who will need to move, those who will be evicted, will be those with fewer resources — thereby contributing to the gendering of poverty (ibid.).

The Barcelona-based Col·lectiu Punt 6 argues how there is evidence that using those tools make for more inclusive planning. That means that it benefits not only women but also children, youth, and the elderly and accounts for power differentials in race, ethnicity, capacity, income, and sexual and gender identity (Ortiz Escalante & Gutiérrez Valdivia, 2015). However, despite the benefits that gender-sensitive perspectives can bring to cities, they say that one of the biggest challengesis to make this value seen to different stakeholders, especially city departments, governments, and other institutions (ibid., p. 122).

One of the methods they use is something they call *awareness workshops*. They consist of exercises in which people can individually reflect on how they experience spaces and then collectively find patterns within their community and agree on the priorities and what needs to be considered while planning (Ortiz Escalante & Gutiérrez

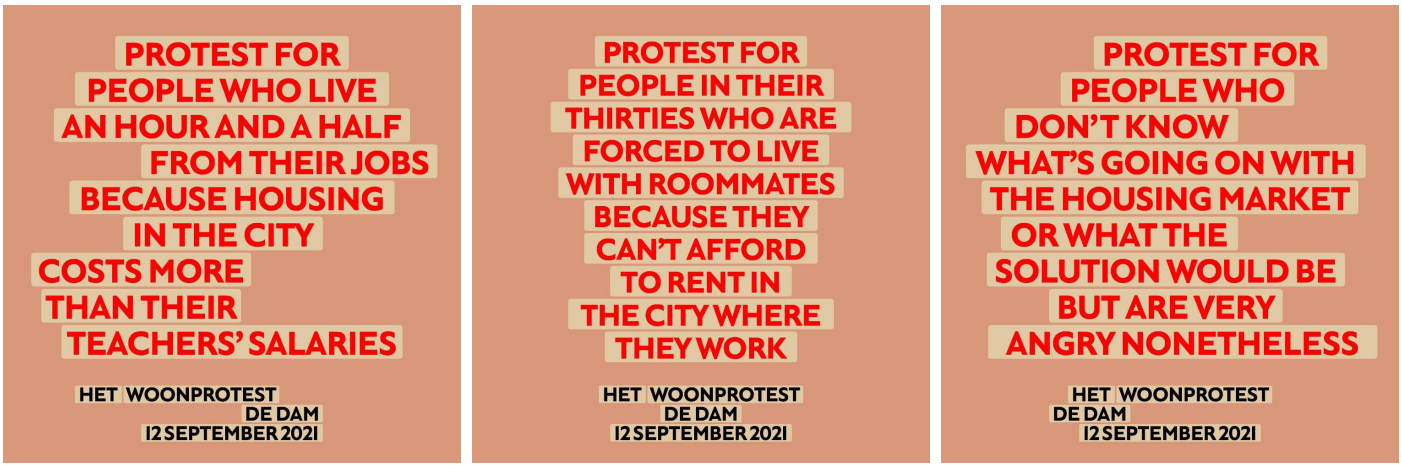
Valdivia, 2015). Their methods for inclusive, participatory planning are grounded in an understanding of empowerment. In their view, empowerment is not regarded as giving power to someone, but rather in "acknowledging the power that individuals and groups excluded from political action already have, and finding mechanisms that can enable the right to exercise their power" (ibid.). Another method they use is what they call *urban walks*, in which they visit physical environments with groups and reflect on the spot about different characteristics of such places (ibid.).

In the UK, we highlight the work of the Women's Design Service in London, an organisation committed to improving the built environment for diverse communities of women. Thanks to their close contact with diverse communities of women, they set participatory projects and offered advice on topics such as (1) outside play spaces for the kids under the age of seven, (2) women and security on housing estates, (3) shoppers' crèches, (4) the design and planning of access for young children and their carers, (5) design for people with disabilities, (6) pollution in the home, (7) design of nurseries, (8) education and, (9) training for women entering building trades and professions, (10) consultation procedures and design participation, and (11) women and transport (Berglund, 2007, p. 15).

Further examples of what types of training could be done around community participation, land use and urban planning can be found in the projects offered by The Center for Urban Pedagogy (CUP). CUP is a nonprofit organisation in Brooklyn that collaborates with designers, educators, advocates, students and communities to support people in "demystifying complex policy and planning issues" (Center for Urban Pedagogy, n.d.). In the centre, they offer training that supports dwellers' awareness of their rights. Training programmes such as "Is Your Landlord Using Construction to Harass You?", "Is Your Neighborhood Getting Too Expensive?", and "Participatory Budgeting", "Is There a Pattern?" (ibid.) speak directly to the gaps between the legislation and the reality of participation in urban matters, and contribute to going from the *passive* to *engaged*.

The following poster about a demonstration for the housing market is infused with the same consciousness-raising approach as the feminist participatory methods for urban planning described above. People who face first-hand the consequences of speculation and discrimination, namely eviction, an increase in rent prices or harassment, should be able to be at the centre of the conversation. As introduced earlier, urbanisation might be a challenge for the real estate sector, but the housing crisis directly affects people's livelihoods.

Figure 3.12: 'Great thread on the nature of the housing crisis in the Netherlands' [Tweet]. By Flor Avelino [@FlorAvelino] (2021).



The previous cases illustrated how people can turn their individual experience, often of oppression, into a collective organisation to demand change.

Sometimes, however, the perception of oppression is imposed from the outside and is not experienced within the community. FEMMA Planning, a Helsinki-based urban planning consultancy, highlights the importance of listening to locals' perspectives to counter harmful narratives that the media, urban planners and decision-makers amplify, especially in the suburbs (Ogbeide & Kallio, 2021).

In their case study "We should change the way we talk about the suburbs in Finland", Efe Ogbeide and Milla Kallio, founders of FEMMA, explain how often the questions of structural inequalities in the Helsinki Kontula area has attracted development projects that (1) do not address the structural sources of inequality and (2) often do not take into account the residents' perspectives. In their view, this is harmful because the stories that we are told about Kontula are developed by people outside of their community and often do not match the residents' experiences (Ogbeide & Kallio, 2021).

"What would happen to storytelling, urban planning, and decision-making if we shifted the perspective on Kontula and other similar neighbourhoods and started to ask what they need?"
Efe Ogbeide & Milla Kallio, founders at FEMMA, 2021.

In *Data Feminism*, D'Ignazio and Klein define this as *deficit narratives*, which are those narratives that "reduce a group or culture to its 'problems', rather than portraying it with the strengths, creativity, and agency that people from those cultures possess" (D'Ignazio & Klein, 2020).

3.2.7 Knowledge Created in Academia for Real Estate

The previous subchapter presented how academia is an institution that also reflects power differentials and how those affect the agenda and type of knowledge produced. Feminist authors argue that knowledge-making has been mainly influenced and perpetuated by groups in positions of power (Bilge, 2013; Lewis, 2013; Valentine, 2007) and that knowledge creation is inherently situational and reflective of the creators' interest (Collins, 1989; D'Ignazio et al., 2020; Haraway, 1988). In other words, academia has been criticised for labelling knowledge as neutral and objective, in instances where it mainly reflects the interests of groups in dominant positions in the matrix of domination.

Real estate studies have highlighted a mismatch between academia and the professionals in the real estate field that needs to be addressed (Toivonen, 2021). In addition, after discussing the examples introduced in this chapter, we argue that there is an even more urgent mismatch to address: The one between *those who define the field* and *those who have historically been oppressed as a result*. For example, in the case of compartmentalised land-use policies, that would be Indigenous communities or in real estate investments based on redlining practices that have been historically designed to secure wealth to whiteness, that would be marginalised communities (D'Ignazio & Klein, 2020).

The consequences that urban and land use planning and real estate investment decisions have in the built environment are too significant to ignore when we think of building sustainable futures. Indeed, using futures thinking methods in the real estate field has been considered to help adapt to future challenges (Toivonen & Viitanen, 2016; Toivonen et al., 2021), although that perspective is still missing in the real estate education curricula (Toivonen & Viitanen, 2016). However, if futures thinking is to be applied to real estate education, we must ask ourselves: *Futures thinking for whom?*

As the futurist Aleksi Neuvonen put it, "the future doesn't exist", and while we try to choose our next steps (as organisations) based on situational and partial interpretation of trends, forecasts or patterns, we might as well decide what futures we desire,

and choose those values as the direction to follow (Neuvonen, 2021). Overseeing different directions towards feminist built environments can contribute to rethinking the relationships between different parts of the system, enabling there a transition towards sustainable transformation (Stroh, 2015).

3.2.8. Recap

The narrow understanding of '*value*' in the private real estate sector as something primarily commercial is not reflecting the plurality of understandings of value that communities have on the built environment around them. Global trends of public neoliberalisation also affect Helsinki and have already been visible in the city, as exemplified in the case of Lapinlahti.

How might the sector reconsider practices and decisions that do not compromise equitable development? We argue that participatory practices driven by feminist principles can enable spaces and platforms where power differentials between actors can be minimised to reach common goals. The following chapters will explore the potentials of participatory practices and hackathons as formats where this collaboration can happen. Then, two case examples from the FFH hackathon (Cities built for the people and Inclusive Lapinlahti) show what types of solutions participants gave under feminist and participatory framings.

3.3 Designing (for) Participation

3.3.1 Collaboration and Participation

We were introduced to the concepts of *imagination battle* and *imagination collaboration* through the work of author, facilitator, and activist adrienne maree brown*. These concepts are grounded in the understanding that we are living inside the imagination of other people. An imagination battle is "when you have to fight against something that is being imagined about you or against someone who is doing that imagining" (brown, 2020), such as the presumption that men are superior and women inferior. Imagination collaboration, by contrast, is about inviting someone to be part of an idea or to create a new idea with you. It is where dreamers and builders meet, and it is also about dignity and harm reduction. In this way, brown poses the questions: "How do we make sure that the people who are most impacted by whatever's happening in a place get to co-imagine how that place can be? How do we prevent those people from being excluded from the conversation because of someone else's power dynamic imagining?" (ibid.).

** adrienne maree brown prefers their name written in lowercase letters because*

- *she enjoys how the design appears visually*
- *amb challenges automatically capitalising the self as part of how capitalism stratifies and commodifies us, and*
- *a word must prove itself worthy of capital*

(Thomas, 2020)

brown argues that there is "a conversation in every room that only the people present can have, and it's our responsibility to find that conversation" (2020). With this, she highlights that who is in the room matters. When people are frustrated and feel like nothing is progressing, it is likely because they are missing the conversation they should be having. They simply are not asking the right questions.

She proposes asking: What is the next, most elegant step we can take? *And how do we find the conversations that help us see our impact?* (brown, 2020).

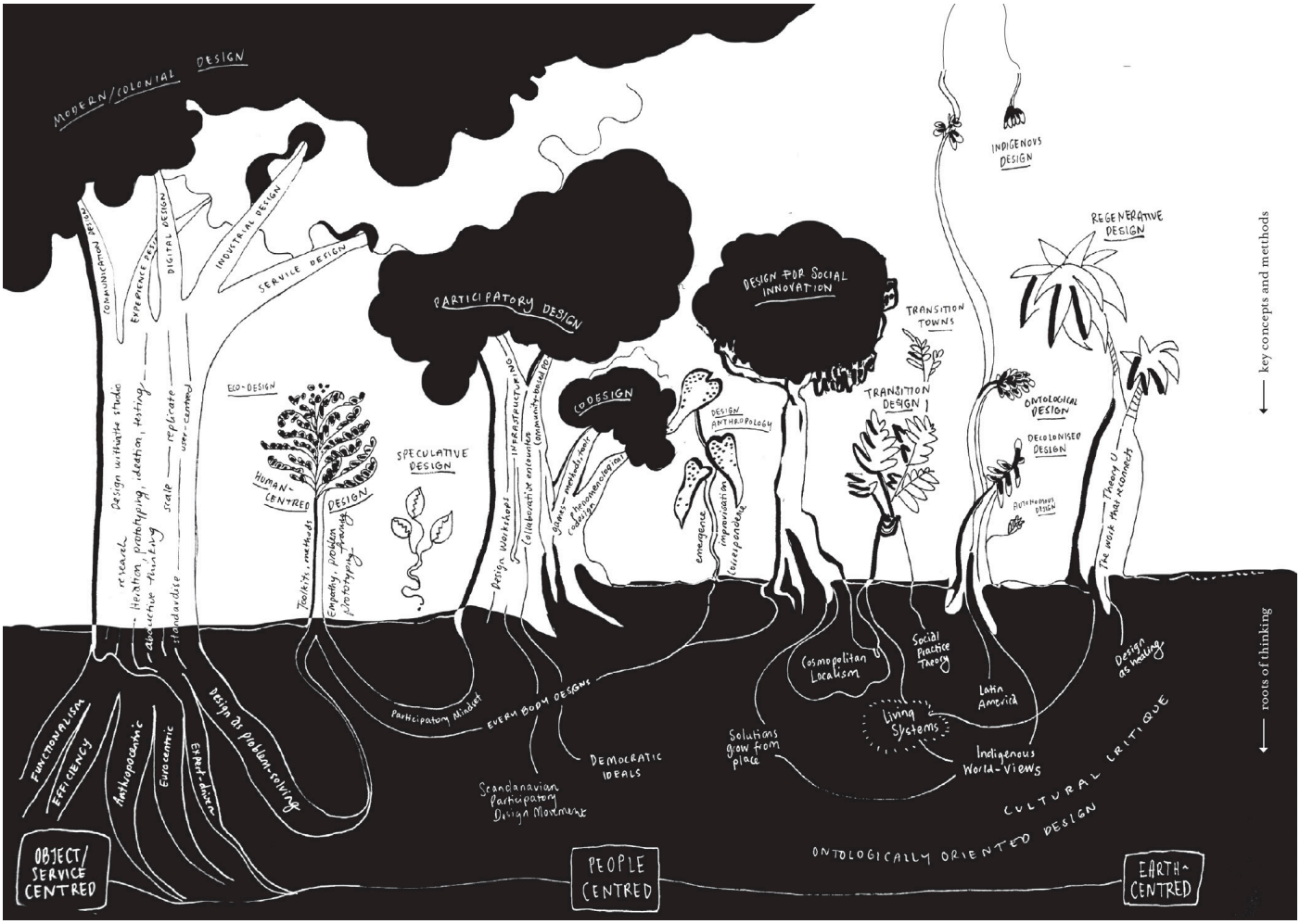


Figure 3.13 Illustrated map of existing and emerging design disciplines, by Kirsten Moegerlein (2019).

The illustration shown on the previous page is from the dissertation of Australian designer Kirsten Moegerlein. It traces many existing and emerging design disciplines in relation to each other, with the height of the trees indicating the age of the discourse and the breadth of the tree canopy indicating the influence of the discourse. The roots indicate ideology as well as connections between emerging domains (Moegerlein, 2019). Participatory design (PD), co-design, and design for social innovation will all, to some degree, be analysed in this chapter. All three of these disciplines are solidly rooted in people-centred design—for good and bad—as it often comes at the expense of the natural environment (Escobar, 1995). As shown on the map, an ideological root of design for social innovation is "solutions grow from place". Later in this chapter, we will explain how this comes to show in other disciplines, e.g. design justice. To the far right of the map, you can see "design as healing" as an emerging ideology that supports Theory U (Scharmer, 2007). Whilst not explored in this thesis, this idea of design's potential as a healing element may be helpful to keep in mind.

According to designer and researcher Ramia Mazé (2019), design is inherently concerned with shaping society. However, making the design of society inclusive will require creating and upholding standards that accommodate multiple ways of being and living (Berglund, 2007). At the same time, we must also make sure that all people can participate in designing this world and these futures regardless of how they identify or where they are from. This is important in order to create a world that is good for the many rather than the few.

This chapter explores different ways in which designing for participation happens — from the well established participatory design to the emerging discourse on design justice. Along the way, we explore the potential for feminism to complement design for participation.

3.3.2 Participatory Design in Scandinavia (The origin of PD)

In the 1960s, designers and researchers in Scandinavia (Norway, Sweden, Denmark) had a growing concern that the introduction of new technology in the workplace would lead to a loss of jobs, a de-skilling of workers and, ultimately, that the changes would only be of benefit to owners and managers. Enter: Participatory Design (PD). The discipline of PD emerged in the 1970s and 1980s to uphold ideals such as workers empowerment, democratic decision making, and a desire to build systems better suited to meet user needs (Asaro, 2014; Costanza-Chock, 2020; Ehn, 2008; Sawhney & Tran, 2020). In PD, "the people destined to use the system play a critical role in designing it. Participatory design thus entails collaborative partnerships and co-construction of knowledge in analysis and co-construction of changes in social practices" (Gregory, 2003). However, PD is not the only design discipline that includes end-users in the design process. Also, user-led innovation, user-centred design (UCD), human-centred design (HCD), inclusive design, and co-design (Costanza-Chock, 2020) are among a growing list of design disciplines that see the value in this kind of process.

PD does not provide a strict set of rules for designing systems but is instead a disciplinary attitude accompanied by guidelines such as: strive for democracy and democratisation; foster explicit discussions of values in design and imagined futures; regard conflicts and contradictions as resources in design; encourage users' thoughtful participation; and be sensitive to the political and ethical challenges faced by designers (Asaro, 2014; Gregory, 2003). In addition, there is often an either implicit or explicit pursuit of mutual learning between designers and stakeholders (Bardzell, 2018).

PD has spread far from Scandinavia since the first biannual Participatory Design Conference (PDC) hosted in the United States in 1990. The conference has since been held in Namibia, Belgium, and Columbia, amongst other locations (Human-Computer

Interaction Resource Network, n.d.). Frustratingly for some practitioners (Bannon et al., 2019), the spread of the discipline has meant a dilution of the original, political sentiments. Designer, activist, and researcher Sasha Costanza-Chock adds that the dedication to the participatory process on the macro level really makes the difference. This dedication is something, they argue, which is often lost in translation in the context of the United States (Costanza-Chock, 2020). In this thesis, we aim to re-establish the focus on political sentiment and systems in participatory processes.

Beyond the designing of systems, PD also designs the processes that create and support these systems. In doing so, PD includes "analyses of power relations and enactments, explorations of participation as a kind of subjectivity, reflections on the benefits of PD and how they are distributed, and more" (Bardzell, 2018, p. 2). This focus on the very human aspects of systems and process design is one of the key things that distinguishes it from other design disciplines.

3.3.3 Designers as Facilitators

Design's complicity with unsustainable practices and the climate crisis has been explored in several disciplines, including HCI and design research (Bardzell, 2018; Fry, 2009; Smith, 2011). Researchers and practitioners within design fields such as critical and speculative design, constructive design, and research through design have explored the potential for a redirected practice of design that would function "as a form of research that critiques the present and/or proposes alternative futures" (Bardzell, 2018, p. 2), rather than as something that simply produces products for the masses. With this shift also comes a shift in the role(s) designers take on.

As we have already established, power is ever-present in any and all interactions, especially in professional and formal settings. Therefore, the power a designer holds as a facilitator will likely affect the dynamics of a participatory process. For example, in the case of the FFH hackathon, we were both there as part of an emerging community, as organisers/facilitators, and as embedded researchers. These blurred lines make a succinct analysis of the power we held very complex, although it is apparent that the latter two positions granted us significantly more power.

An essential element in studying any form of design that includes participatory methods (be it PD, co-design, user-centred design or other) is considering the power that designers hold as facilitators rather than experts or makers.

The idea of the designer as a facilitator is also a key element of design justice, which will be further explained in section 3.3.7. Designer, facilitator and author David Sibbet defines facilitation as "the art of moving people through processes to agreed-upon objectives in a manner that encourages participation, ownership and creativity from all" (2002). While this definition was borne in the workplace domain, it can also be applied elsewhere. For example, participatory design scholars and practitioners Ann Light and Yoko Akama argue that the complexity of the facilitator's role increases drastically when a project instead attempts to tackle more significant societal and environmental issues beyond the workplace (Light & Akama, 2012).

Every participatory engagement encompasses a complex ecology of socio-cultural, political, design-centric, and personal concerns that will inevitably influence the process and/or outcomes (Sawhney & Tran, 2020). Thus, even the most experienced facilitator must consider the complexity of each context at both the macro and micro-scale. However, it is often the micro-dynamics of participation that can be the most intense and, in the words of Light and Akama, "engaging people in change can be a messy process, especially when emotions run high" (2012, p. 61).

Even broader power dynamics do not magically disappear within design teams simply because everyone is committed to a set of ethics or a code of conduct. Sasha Costanza-Chock describes how structural inequalities such as gender, race, class, Disability, education, and language will always permeate an environment even with the best intentions. For example, in describing education environments, Costanza-Chock says: "these forces are in play between students from different backgrounds, between students and educators, between students and community members, and so on. These are complex dynamics that can be difficult to navigate" (2020).

If we cannot avoid the power dynamics that influence our roles as facilitators, what must we do to move forward ethically? Sawhney and Tran propose that recognising the existence of different power relations in social contexts offers an opportunity to create room for dissent and conflictual consensus to "manifest as real alternatives to imposed dispositions, forced choices and tokenistic participation" (2020, p. 1). In doing so, accountability and reflexivity become inevitable parts of the process.

3.3.4 Critique of Participatory Design

Thus far, we have heard of PD's democratic values through the inclusion of workers and meeting user needs. This all sounds commendable. *So why would PD be criticised?*

Firstly, it is argued that simply letting someone sit in on a meeting or "including" them in the process does not equate to them having any actual power (Asaro, 2014). Moreover, if issues regarding sexism, racism, ableism and other oppressive forces are not acknowledged and proactively dismantled, then one can only expect these to be reinforced through this process. Even though the PD of the early days included a critique of power inequalities and sought to address social inequality, it mainly did this from a class perspective. As well as being marginalised in professional settings, women and minority groups were also marginalised in the early articulations of PD (Lykes & Hershberg, 2012). Participation in any design process is shaped by power, and participants will always feel like they have more or less power than others, which will, in turn, reflect the degree to which they can participate and be heard (Costanza-Chock, 2020). In addition to this, the 'participatory' element of PD "is usually taken to mean participation in discussions about a technology, as opposed to actual participation in the construction of a system as engineers or builders" (Asaro, 2014, p. 345).

Today, participatory design is used beyond the company setting to engage vulnerable or underserved communities in the design of their environments. However, according to Dillahunt et al., traditional participatory design methods used in many of these projects, such as focus groups, user testing, and surveys, often do not meet the needs and concerns of the participants (2017). In addition, some researchers have raised concerns about the extractive nature of these processes, stating that in many cases, the primary beneficiaries of the process are the professional design researchers and practitioners rather than the community the project is aiming to serve (Costanza-Chock, 2020). This leads to questions regarding the application of these methods among specific populations. Again, there is an element of power at play here.

In addition to these critiques, Bannon et al. composed a list of concerns in 2019, based on a wide-reaching survey conducted within the PD practitioners' community. Amongst other issues, the list included:

- A sense that participatory design has lost some of its clarity and/or identity;
- A concern that participatory design has been depoliticised, dropping its original commitments to democracy and dialogue in favour of more consumer-oriented methods;
- Questions about how well the original so-called Scandinavian model applies to the rest of the world, or even to Scandinavia today;
- Questions about how well participatory design can scale, from the past interventions with small teams to more global concerns (Bannon et al., 2019, p. 28).

In addition to these, we would add:

- A concern is that organisations and communities engaged in PD processes are not receiving the financial recognition that reflects their value, time, and attention (Berglund, 2007).

3.3.5 What's Next for PD?

With these critiques in mind, one might wonder: *What is next for PD?*

Based on their survey, Bannon et al. lay out a few different opportunities. Firstly, they propose that PD be more directly engaged with the political approaches to design that have emerged in recent years in fields such as Human-Computer Interaction (HCI): Feminist HCI, Post-Colonial Computing, and PAR (Bannon et al., 2019). Each of these approaches, they claim, "features sophisticated theories of power, participation, and intervention" (ibid, p. 31). Therefore, there is a potential for new developments in critical and political theory to enrich PD and, in turn, enrich the approaches mentioned above with mature design methods. This proposal is not far-fetched, as it aligns with the early PD projects: they sought to think bigger than interfaces and apps but somehow struggled to scale.

Secondly, Bannon et al. propose a reimagining of PD as a continually evolving discourse. This would position PD as an active discipline adapting to its context (in space and time). They call on designers and researchers to leverage their skills to work towards a more equitable world and believe the core emphases of PD can shape this pursuit: "public participation, sensitivity to social conflict, shared trust, mutual learning, security and fairness — updated to reflect today's world as well as contemporary socio-political theory and activist methods" (Bannon et al., 2019, p. 32).

Finally, Catherine D'Ignazio (2019) explains how despite obvious linkages between disciplines such as PD, feminist HCI, anti-oppressive design, intersectional HCI, post-colonial HCI, anarchist HCI, queer theory, critical disability theory, and design justice, the frameworks have not yet provided any specific guidelines for collaboration with minoritised groups, how to navigate trauma, and how the design process itself can function as a way to heal and to build collective solidarity. Therefore, there is a potential for PD to play a role in developing such guidelines, provided that it engages more critically with systems of oppression (see, e.g. Costanza-Chock).

Next, we will continue to reflect on the opportunities for closer collaboration between feminism and participatory approaches.

3.3.6 Participatory Research, Meet Feminism

According to professor Shaowen Bardzell (2018), the companionship of PD and feminism is a natural one. This, she claims, is because both are committed to a view of democracy that "foregrounds relations of power and that proactively seek to give voice to the marginal" (p. 3). However, as we have already covered earlier in this chapter, while intention and action align in theory in many PD projects, a gap materialises between them in practice. Bardzell has explored the intersections of feminism and utopianism in the context of HCI, which prompted her to ask: "What can 'participation,' 'meaningful alternatives,' and 'local accountability' mean in the context of IT design [which is] meant to contribute to transformative changes in human-caused problems, such as climate change, patriarchy, intercontinental refugee crises, mass extinction, poverty, and so on? Is global participation possible or desirable? Is it reasonable to hope for 'meaningful alternatives' for problems such as these? Does PD's commitment to 'local accountability' still make sense as a value, for instance, on a topic such as climate change?" (Bardzell, 2018, p. 19). We find these perspectives particularly interesting, given that the primary purpose of the FFH hackathon was to imagine feminist futures in Finnish society. What happens to the concept of accountability when the issue at hand is of global influence and thereby has no one governing body responsible?

The questions Bardzell poses may feel overwhelming as they explore infinitely complex issues. However, as she argues, feminists and other social justice activists have taken on questions like these for many years. She suggests an alternative (feminist) utopianism as a possible way to start imagining the futures of these complex issues. Aware of the reputation utopianism has as 'wishful thinking', Bardzell instead proposes "replacing traditional utopianism's fully described but impossible to achieve utopian image (e.g., a perfect city) with a possible-to-achieve but impossible-to-represent image" (Bardzell, 2018, p. 19). For example, if, as feminists, we believe that patriarchy is a man-made concept, we should also have the resources within our societies to dismantle it. Even if we cannot yet imagine exactly what a post-patriarchal world would look like, a participatory strategy would likely contain the tools, processes, and mechanisms we would need to pursue it (ibid).

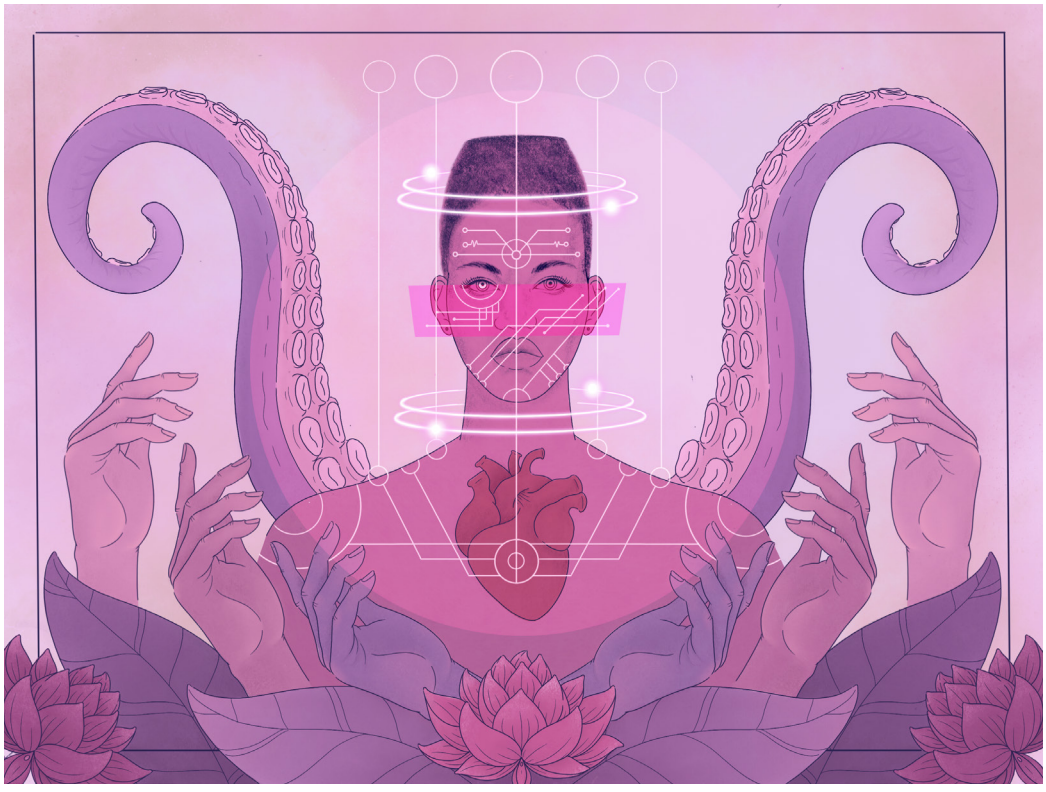


Figure 3.14: The Oracle for Transfeminist Futures. From a game by the same name, developed at Coding Rights in partnership with media makers and scholars Sasha Costanza-Chock and Clara Juliano.

The game is a playful tool designed to help the players collectively envision, prototype, and share ideas for alternative imaginaries of futuristic technologies. The game explores agency, autonomy, empathy, embodiment, intuition, pleasure, and decolonisation (Varon, 2020).

One might argue that feminist utopianism may function as a type of *backcasting*, a framework often used for strategic planning in complex environments. Rather than forecasting the future based on existing data, backcasting skips ahead to imagine a desirable future and then comes up with a plan to reach that desirable future. It is said to help manage complex issues in a systematic and coordinated way (Holmberg & Robert, 2011). Imagination collaboration (brown, 2020), the concept introduced at the beginning of this chapter, would be ideal for imagining a feminist utopia. By making a conscious effort to bring together dreamers and builders, the gap between the reality of today and the desired future may be bridged.

A study at Cornell University in 2003 gathered academic and community feminists and activists who engaged in action research methods to further their agendas. Feminist, scholar-practitioner, and activist Patricia Maguire was one of the leading researchers on this project. She suggested that "participatory and action research brings to feminist theory a challenge to act, while feminism has importantly challenged action researchers to turn their critical lens towards women's experiences of oppression and marginalisation as well as to the important strengths women bring to social change work" (Lykes & Hershberg, 2012, p. 335).

In their paper on PAR and feminisms from 2012, researchers M. Brinton Lykes and Rachel Hershberg put forward the idea of "feminist-infused participatory and action research" (FIPAR), an approach we find suits our work. In the paper, they explore similarities and differences across feminist-infused participatory and action research. In the following section, we will highlight three takeaways from the FIPAR framework that are highly relevant to our work with the hackathon. They are (1) reflexivity, (2) multiplicity of voices, and (3) research relationality (building and sustaining relationships).

1. Reflexivity: Self as vehicle for reflection and action
Sociologist Nancy Naples (2003) argues that researchers must create a space of engagement where participants can reflect on and discuss the process they are undertaking. She suggests that these strategies enable privilege to be made visible as data. This approach allows feminist researchers to "reveal the inequalities and processes of domination that shape the 'field'" (Naples, 2003, p. 38). Reflecting on one's own position is a common feminist practice (see D'Ignazio & Klein, 2020; Haraway, 1988; Kaba et al., 2017).

However, some researchers argue that an extension of this idea, moving beyond reflectivity to reflexivity, would be a beneficial addition to participatory and action research processes (Lykes & Hershberg, 2012). Reflexivity refers to "the ability to reflect on and take responsibility for one's own position within the multiple, intersecting dimensions of the matrix of domination" (D'Ignazio et al., 2020, p. 18). In this case, the suggestion is specifically for researchers and participants to "use themselves and their critical reflections about themselves to generate knowledge and collective action" (Lykes & Hershberg, 2012). Through these critical self-reflections, the researcher could access different kinds of knowledge about the process at hand (ibid).

2. Multiplicity of voices
Most FIPAR projects aim at some level to 'break the silence', 'engage diverse voices' and 'generate audiences to hear women's varied stories' (Lykes & Hershberg, 2012). However, there are multiple systematic barriers to reaching a point where participants can fully express themselves. One of these barriers is language (ibid.), which, in this context, refers to different forms of language, such as if participants are engaging in a language that is not their native tongue or if researchers engage participants outside the academy. In the latter case, researchers may use an academic language so far removed from the community that meaning is lost.

In the same way, researchers engaging with communities that are not their own may miss essential nuances, which may translate into research that does not reflect the experience of that community. Therefore, Lykes and Hershberg suggest that cultural interpreters and translators may serve as important bridges between the communities and institutions (2012). It should be made clear here that the goal should never be to erase the differences or pretend they do not exist, nor should it be done in a way that reinforces a sense of 'othering'. Instead, this cultural translation* should serve as a way to create a space of "mutual empathy and solidarity, while recognising and respecting the validity of different standpoints and life experiences" (Costanza-Chock, 2020).

** We use cultural translation to refer to encounters between people from different backgrounds in which each side tries to make sense of the action of the other.*

3. Research relationality: Building and sustaining relationships

The final takeaway from the FIPAR framework speaks to the importance of establishing collaborative research relationships. This is fundamental to many qualitative research approaches and is used by critical theorists and constructivist feminist researchers. Lykes and Hershberg explain that FIPAR is built upon this commitment to building and sustaining relationships and that "it is through relationships that participants are transformed. Hierarchical research models are antithetical to this value system" (Lykes & Hershberg, 2012, p. 354).

The authors explain how people who undergo a personal and collective change through a FIPAR process are likely to naturally form bonds and connections that transcend the bounds of the research project. McIntyre and Lykes (2004) even argue that friendships formed through long-term commitments to social justice may more accurately describe FIPAR. In fact, "it has been argued here that such bonds are the stuff of transformation" (Lykes & Hershberg, 2012, p. 354).

Other explorations of feminist PD

In their 2019 article "Hackathons as participatory design: Iterating feminist utopias", members of the feminist collective Make the Breast Pump Not Suck propose five design principles for those seeking to incorporate a feminist and intersectional lens into participatory design processes: intentionally structure equity; leverage privilege and institutional power; push for narrative change; cultivate joy and play; and uplift low-tech and no-tech innovations (Hope et al., 2019). In our hackathon, we deployed all of these principles to some extent.

In 2000, professor of history, development, and women studies Jane Parpart published a paper on "The Participatory Empowerment Approach to Gender and Development in Africa". She describes requirements for rethinking and implementing participation and empowerment techniques for action researchers and participatory development (Lykes & Hershberg, 2012). She challenges action researchers and feminists to "(...) develop a more nuanced and sophisticated analysis of power. (...) [that] incorporate[s] an analysis of the way global and national power structures impact on the local, the character and resilience of local power structures, the link between knowledge/discourse and power, and the complex ways people seek to ensure their well-being in the world. (...) Participatory empowerment techniques will have to pay more attention to the way national and global power structures constrain and define the possibilities for change at the local level" (Lykes & Hershberg, 2012, p. 360; Parpart, 2000, p. 18).

Keeping these different power levels in mind, let us return to Bardzell's speculations on feminist utopianism and PD. She proposes a number of tactics for further development and testing. We find the most interesting one to be the following: the application of a long-standing feminist commitment to attend to the bodies of those with whom we are concerned (Bardzell, 2018, p. 20). This commitment is not just in the sense of embodiment but rather as a way of understanding socio-technical infrastructures and how they affect different bodies. As researchers and practitioners, this approach

encourages us to notice how the technologies and infrastructures of the future will participate in upholding systems of oppression. For example, how will a system be experienced differently in a body that is male/female/non-binary/intersex, cisgender/trans*, Black/white, old/young, citizen/immigrant, and poor/wealthy respectively? (ibid).

This focus on how different bodies experience the world is a topic we will explore further in the following section on design justice.

3.3.7 Design Justice

So far, we have discussed different ways of designing for participation that either work to reinforce or challenge existing power structures. One approach to design that is deeply rooted in social justice and aims to change how we view the designers' role fundamentally is design justice. The Design Justice Network emerged from a growing community of designers in the United States in the mid-2010s, from different fields, working within the intersections of design, social movements, and community-based organising. It has quickly spread internationally with networks in several countries. While the network consists of many voices, the movement has especially been mobilised through the publication of the book *Design Justice* (2020) by researcher, activist, and designer Sasha Costanza-Chock, one of the key figures in the network.

Design justice builds on many movements that came before it, such as intersectional feminist, queer, and Crip theory and practice. A lot of the inspiration comes from the work of Disability* rights and Disability justice activists, who in the 1990s popularised the phrase "nothing about us without us" (Charlton, 1998). This phrase has been fundamental to our work with the hackathon and our approach to finding our partners, as we will explain further in section 4.2.1. Whilst the design justice and Disability justice movements have many things in common, their relationship can most easily be described as: "Disability justice is to the disability rights movement what environmental justice is to mainstream environmentalism (Costanza-Chock, 2020). These movements have significantly influenced the built environment we live in today, the technology we use, and the media we consume (ibid).

** The capital D in Disability illustrates that Disabled people have a shared identity and are part of a community that continues to fight for equality, similarly to other groups in society like Black people or LGBTQI+ people. Some Disabled people prefer this way of writing. We will use the capitalised D when referring to Disabled people or the Disability rights/justice movements.*

Another group that has been influential to the foundations of design justice is the Canadian organisation Inclusive Design Research Centre (IDRC). IDCR describes the relative nature of disability and accessibility and defines disability as "a mismatch between the needs of the individual and the design of the product, system or service" (Inclusive Design Research Centre (IDRC), n.d.). An example of this could be: Being in a wheelchair is not a problem until stairs are the only way to enter a place. Another example could be: "When listening to an audio-only lecture the student who is blind is less disabled than the student who has not read the background material, the student who is less fluent with the language, or the student who has been up all night. An audio lecture is designed for a student who has the contextual knowledge, understands the language well, and can fully attend" (ibid.). Inclusive design practitioners and researchers, therefore, argue that it is not possible to determine whether something is accessible or not unless you know the user, the context, and the goal, and with this framing, anyone can potentially benefit from inclusive design (Costanza-Chock, 2020; Inclusive Design Research Centre (IDRC), n.d.). In other words, inclusive design prompts designers to ask: *For whom is the system/environment/technology designed? Who benefits from it being designed that way? Who is left out/forgotten?*

Also, the American Disability justice based performance project, Sins Invalid, has been an inspiration for design justice. Sins Invalid is led by Disabled people of colour and celebrates artists with disabilities, and centralises artists of colour and LGBTQ/gender-variant artists as communities who have been historically marginalised (Sins Invalid, n.d.). Their principles for Disability justice include:

- Intersectionality: "We do not live single-issue lives" – Audre Lorde.
- Commitment to cross-movement organising: Shifting how social justice movements understand disability and contextualise ableism, Disability justice lends itself to alliance politics.
- Recognising wholeness: People have inherent worth outside of commodity relations and capitalist notions of productivity. Each person is full of history and life experience.
- Collective liberation: No body or mind can be left behind – only moving together can we accomplish the revolution we require (ibid.)

It is a fundamental belief in design justice that we should be building a better world, where many worlds fit and, importantly, belong, and where co-liberation (see chapter on Feminism(s) for more on this) and the planet thrive sustainably (Costanza-Chock, 2020). Design justice is defined by a living document of principles that are designed to be adapted with time. At the time of writing, these principles have been adopted by over three hundred people and organisations (Costanza-Chock, 2020):

1. We use design to sustain, heal, and empower our communities, as well as to seek liberation from exploitative and oppressive systems.
2. We center the voices of those who are directly impacted by the outcomes of the design process.
3. We prioritise design's impact on the community over the intentions of the designer.
4. We view change as emergent from an accountable, accessible, and collaborative process, rather than as a point at the end of a process.
5. We see the role of the designer as a facilitator rather than an expert.
6. We believe that everyone is an expert based on their own lived experience, and that we all have unique and brilliant contributions to bring to a design process.
7. We share design knowledge and tools with our communities.
8. We work towards sustainable, community-led and controlled outcomes.
9. We work towards non-exploitative solutions that reconnect us to the earth and to each other.
10. Before seeking new design solutions, we look for what is already working at the community level. We honor and uplift traditional, indigenous, and local knowledge and practices (Design Justice Network, 2018).

Design justice challenges the *good intentions* of designers, arguing that good intentions alone are not enough and that we need to rethink the extractive processes that are unfortunately often a part of socially- and community-engaged work. The practitioners in this field are working to find new ways of producing community ownership, profit, credit, and visibility. Questions around how a community is defined and what it needs and wants are also common within other fields such as urban planning, PAR, PD, and development studies (Costanza-Chock, 2020).

Rather than using design to extract knowledge from the community to create something new, design justice practitioners instead ask how design may be used to amplify, support, and extend existing community-based processes. Instead of assuming what the community needs, design justice practitioners ask how design best serves their interests and needs (Costanza-Chock, 2020). In other words, unlike other approaches to PD, design justice practitioners choose to work in active solidarity with community organisations. This is closely related to asset-oriented approaches to

community development, in which the focus is on the strengths of the community rather than the problems. According to Costanza-Chock, design justice can even work as a form of community organising: "Design justice practitioners, like community organisers, approach the question of who gets to speak for the community from a community asset perspective. This is rooted in the principle that wherever people face challenges, they are always already working to deal with those challenges; wherever a community is oppressed, they are always already developing strategies to resist oppression" (Costanza-Chock, 2020, p. 92).

"If you have come here to help me, you are wasting your time. But if you have come because your liberation is bound up with mine, then let us work together."
(Aboriginal activists group Queensland, 1970s)*

** This quote is often attributed to Aboriginal Australian activist and artist Lilla Watson. However, she stresses that this quote should not be attributed to her alone but that it is the work of many others and, therefore, prefers it be attributed as done here.*

Furthermore, this way of working reinforces a strong sense of accountability to the community members. Remember the root from the map at the beginning of this chapter, stating that "Solutions grow from place"? This is precisely that.

3.3.8 Recap

Designing for participation is a more complex process than what initially meets the eye. Power differentials, context, and history all play vital roles in the outcome of such a process. The reframing of designers as facilitators simultaneously demands a reframing of what it means to participate. We must ask: *Who gets to participate? Who has the power to decide who gets to participate? And what are the conditions we must create to achieve equitable participation?*

Feminism offers a promising framework to ensure political awareness in participatory processes, and design justice provides a clear set of principles to ensure an intersectional approach to design.

3.4 The Culture and Politics of Hackathons

Innovation and design have always happened all around us. Yet, somewhere along the line, "*innovation*" came to be associated with neoliberal entrepreneurialism — or in other words: The kind of stuff that comes out of Silicon Valley. While oppressed and minoritised peoples do have their own design practices and communities, they are most often made invisible or made to seem "less important". These spaces are what Sasha Costanza-Chock calls "subaltern design sites" (Costanza-Chock, 2020).

Innovation means different things to different people. To some, it means to invent a new thing or to think about something in a novel way (Merriam-Webster, n.d.-c). However, the authors of this thesis look at innovation not just as "offering novelty". We also see innovation as giving attention and resources to tackle a particular situation related to a specific community.

Hackathons are but a piece in a giant puzzle of spaces and events that offer frameworks to foster innovation. For example, a fabrication laboratory, or fablab, is "a small-scale workshop offering (personal) digital fabrication" (Costanza-Chock, 2020). They include different tools and machinery for design, modelling, prototyping, fabrication, testing, monitoring, and documentation and often offer courses and memberships (ibid.). In addition to fablabs, there are hackerspaces, hacklabs, maker spaces, innovation hubs, co-creation events, and many more.

However, we have limited the scope of our thesis to focus specifically on hackathons (with the occasional mention of hackerspaces). Therefore, this chapter will: (1) introduce the concept of hackathons, (2) present different critiques of hackathons, (3) show examples of alternative ways of doing hackathons (specifically the ones that inspired our hackathon), and (4) position hackathons in the Finnish context.

3.4.1 Hackathon 101

"The mythology of hackathons is perhaps best expressed in the 2010 film The Social Network. In one scene, a young Mark Zuckerberg presides over what is essentially a frat party, but with computers. Drunken (white, cisgender, male) college student developers gather in a dark basement, bingeing on beer and pizza, competing to solve a coding challenge and thereby win employment at the then-nascent social network site TheFaceBook.com" (Costanza-Chock, 2020, p. 159).

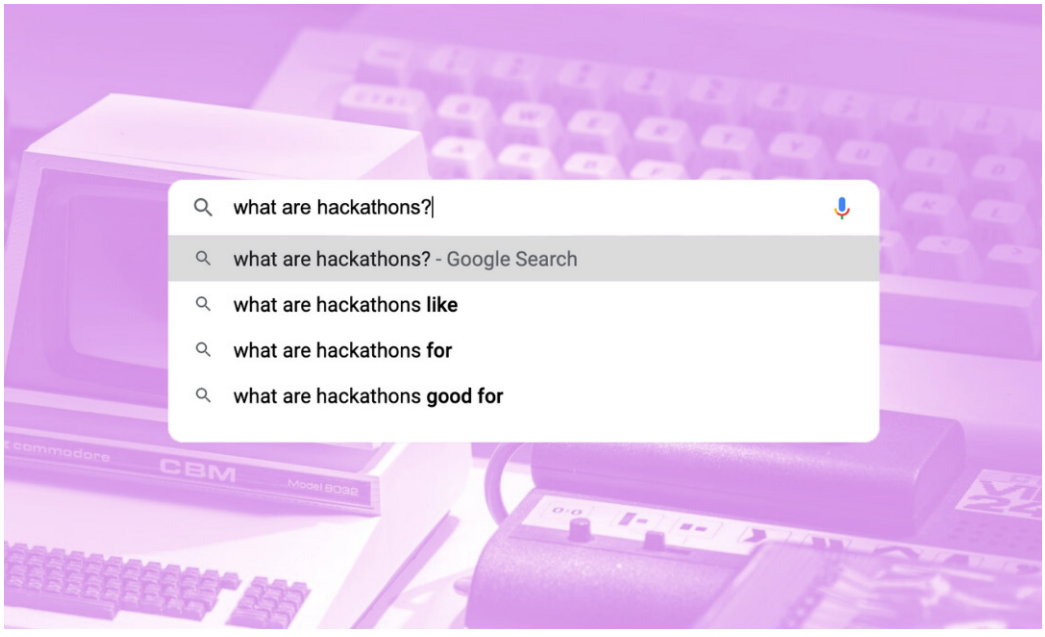


Figure 3.15: 'What are hackathons?', by Helmi Korhonen for Feminist Futures Helsinki (2021).

As mentioned in the introduction, innovation and design happen everywhere, but only specific spaces are glorified as "ideal locations" for design practices (Costanza-Chock, 2020). This has a profoundly colonial background. For example, consider what differentiates a weaved basket from an "unknown" craftswoman in a marketplace in Vietnam and an Alvar Aalto vase in Finland. Both have come from some inspiration (internal or external); both require skill and mastery, and both are sold commercially. Nevertheless, only one is considered a designer piece, and the other simply a piece of 'local handicraft'. Neither the country of origin or the gender of the two creators in this example is coincidental.

According to the Merriam-Webster dictionary, a hackathon is "an event in which computer programmers collaborate intensively with one another and sometimes with people in other specialities over a relatively short period of time to create code usually for a new software product or service" (Merriam-Webster, n.d.-b). However, as it might be understood by now, many alternative models for hackathons have started appearing. This will be further explained later in this chapter.

In the typical model described in the Merriam-Webster dictionary and many fables of Silicon Valley and technological advancements, teams compete to solve design challenges in a time-intensive sprint. They often take place over anything from a few hours to a weekend and end in a big pitch competition evaluated by a panel of judges (Costanza-Chock, 2020). Big corporations usually sponsor these events to gain some 'young' and 'fresh' input to their business. The winners receive prizes, usually monetary, and might receive other benefits such as publicity or the possibility to pitch their idea to someone in a high position in the sponsoring company or to venture capitalists. The value of these events is increasingly being recognised, which has led to a small sector of for-profit companies promoting themselves as "expert hackathon organisers" (ibid). Moreover, hackathons are known to provide valuable pathways into associated professional fields as if they offer networking and technical/design-related opportunities (D'Ignazio et al., 2020). However, as we will introduce in the next section, hackathons have also been heavily critiqued for their extractive and solutionist nature.

3.4.2 Why Are Hackathons Critiqued?

This section will present some of the most common critiques of hackathons. We discuss these using feminist values and equitable, participatory design practices to approach community-based innovation.

Hackathons encourage tech solutionism

In hackathons, teams are given a limited period to transform the assigned problem into a pitchable solution. They then present it in front of a jury that determines who the winning team is. Considering this framework, one of the principal critiques of hackathons is that they encourage teams to develop technological solutions to solve wicked societal problems that have been oversimplified (Costanza-Chock, 2020; DeTar, 2013; Hope et al., 2019; Lin, 2016). Instead, what is needed is democratic consensus, strong social movements, and policy (Costanza-Chock, 2020).

In hackathons, it is common to attempt to "reinvent the wheel" (DeTar, 2013; Hope et al., 2019). Moreover, this tendency of creating something "new" over maintaining something "old" is infused by the patriarchal idea that the new is more important and desirable than caretaking, maintaining or supporting (Costanza-Chock, 2020; Lin, 2016). Attempting to reinvent the wheel is also not uncommon in "tech-for-good" hackathons, as there is the same tendency to ignore the work already done. Coming up with more solutions is more encouraged than understanding why the current(s) solution(s) do not work (Costanza-Chock, 2020).

In his book *To Save Everything, Click Here: The Folly of Technological Solutionism*, Evgeny Morozov argues that what is contentious about solutionism lies more on the definition of the problem itself rather than on the offered solution (Morozov, 2014). In other words, attempting to simplify a problem so it can be easily solved in a short time is questionable as it requires a type of process that does not encourage critical thinking.

"The problems that we are all trying to solve are observable. We don't necessarily need a big study to tell us that the way innovation is being done is inequitable. You don't need a study. Just look. Just look at what is made, look at who is left out and who doesn't come to these events"
(Alexis Hope, interview, August 20, 2021)

In that sense, innovations that would not be centred around technology only, would lower the risk of solutionism as they would focus more on understanding the context. Unfortunately, however, hackathons' time constraints favour computational logic over debates and discussion (Hope et al., 2019) and dismiss marginalised people's experiential knowledge and domain expertise (Costanza-Chock, 2020). An illustration of those constraints is pressure to present something in a pitch style to the investors. That setting prioritises creating new solutions fast before getting in touch with actors in the field to know what has been done already (Costanza-Chock, 2020).

These different factors contribute to the belief that technology can solve any challenge, which is problematic when wicked societal problems need to be addressed. If a hackathon follows a format that prioritises coming up with short-term solutions to reduce harm, it fails to develop strategies to dismantle structural barriers (D'Ignazio, 2019, p. 16).

Also "tech-for-good" hackathons have been criticised for appearing solutionist. For example, in one of the MIT hackathons, participants gave the feedback that human-centred design could reinscribe oppression because it can frame marginalised communities '*as a problem to be solved*' (Hope et al., 2019, p. 6). This problem-oriented rather than asset-oriented approach, focusing on the community's strengths, makes it problematic to apply design justice principles (Costanza-Chock, 2020).

Culture of exclusion and alienation

"More Than Code participants mentioned many problems with the dominant hackathon model: most hackathons don't produce working products, that hackathons can bring out weird power dynamics with people competing for leadership, and that women often experience sexism at hackathons. Hackathons often reinforce elite networks and do not include the most impacted community members. For example, one noted that most hackathons meant to help low-income people don't usually have the intended end user at the table" (Costanza-Chock, 2020).

In her study on feminist hackerspaces in the United States, activist and researcher Sophie Toupin (2014) identified tensions between feminist values and the dominant hacker narrative of openness. She argues that this is one reason why women hackers were less often found in the traditional hackerspaces. Generally, hackerspaces are promoted as places where anyone interested in hacking and technology is welcome to join. However, this leaves little safety or protection from harassment for groups such as women, queer folks, people of colour, among others, who are not as heavily represented, resulting in them simply not wanting to engage with those spaces. DeTar also argues that hackathons were "often dominated by white, cisgender men with software-development skills, they tend to be exclusive, normative, and solutionist" (DeTar, 2013).

The physical space of the hackathon also matters. The intensity (in length and pace) of hackathons contributes to a culture of exclusion by not accommodating rest, dietary restrictions, or caretaking, contributing to "signal a narrow definition of who belongs" (Hope et al., 2019, p. 3).

Civic engagement or unpaid labour?

Another critique of hackathons relates to labour. According to social scientist and thought leader Melissa Gregg (2015), "civic hackathons are positioned as rational investments of time and labour, a socially beneficial and distinguishing extracurricular activity in the cut-throat market for viable, fulfilling and ongoing work" (p. 3). While it is no doubt true that hackathons can be very socially beneficial, this attitude is problematic for a couple of reasons. One reason is that it reinforces an existing pressure on young people to engage in free labour to get a headstart in their careers (ibid.). This in and of itself exposes a problematic tendency for people with economic privilege, who can afford to perform free labour, to get a head start early on. This has been shown to lead them to higher positions of power than their peers from less financially advantaged backgrounds (Criado-Perez, 2019). In addition, some argue that hackathons that aim to address societal issues overburden participants to take personal responsibility for the decline in civic resources (Gregg, 2015) and that perhaps addressing those issues should be the responsibility of the cities/public body (Costanza-Chock, 2020).

3.4.3 Retailoring the Hack

Considering the multitude of issues identified with hackathons and the culture and politics surrounding hacker culture — *why would we choose this format?*

The way we see it, and from what our research shows, the format does not necessarily dictate the culture. However, when a specific culture has dominated a format for a long time, it will, of course, require some very deliberate choices to break free from convention and create something novel. The following sections will explore a few of the hackers that came before us and paved the way to create the Feminist Futures Helsinki hackathon. The examples we will present explore cultures of craft-based knowledge and practices of community-building and attempt 'to hack the concept of hackerspaces or hackathons' — a sort of meta-hack. In turn, these efforts aim to reshape the meaning of hacking itself "as a way to hack life in all its forms so as to (re)gain autonomy" (Hope et al., 2019; Toupin, 2014).

The previous chapter discussed Shaowen Bardzell's exploration of feminist utopianism. Her proposition of marrying participatory design, feminism, and utopianism in order to imagine, and then build, the futures we want to see, creates a sense "that the responsibility to bring about, rather than wait for, the future is our burden, today" (Bardzell, 2018; Hope et al., 2019). This same urgency appears throughout the upcoming analysis of the feminist and socially and politically engaged hackerspaces.

Section 3.4.2 mentioned how the culture and setup of hackathons have made it a hostile environment for women, lesbian, gay, trans* and queer (LGBTQI+) persons, and people of colour, among others (Toupin, 2014). However, more and more designers and researchers are exploring new models for and discourse around hackathons by acknowledging these critiques. For example, rather than feeling restrained, feminist research collectives such as the Make the Breast Pump Not Suck Collective feel motivated by the participatory potential of "hackathons as a collaborative design space" (D'Ignazio et al., 2020, p. 2). In addition, they also see their potential to lead to the creation of relationships and technologies (broadly defined) that might "engender a more equitable world" (ibid.). Likewise, design justice practitioners, such as Sasha Costanza-Chock, see hackathons as potentially valuable sites for the practice of design justice through learning, making, problem-solving, community building, and

play (2020). As we know from the previous chapter, "design justice is about the fair distribution of design's benefits and burdens; fair and meaningful participation in design decisions; and recognition of community-based design traditions, knowledge, and practices" (ibid).

This new wave of hackathons that aim to address more politically engaged challenges, such as breast pumps and reproductive justice (see, e.g. www.makethebreastpumpnotsuck.com), the SDGs (see, e.g. www.solvethesdgs.com) or chronic homelessness (see, e.g. www.hackforacause.org), have been dubbed with names such as "civic", "social-issue", and "philanthropic" hackathons. They have been appropriated by governments, international institutions, and non-profits to address "social-issue" challenges — again, with pro-bono work (Porter et al., 2017). Beyond prompting questions around the ethics of this continuation of unpaid labour in the name of "social good", a new challenge has emerged: It is no longer clearly defined what a hackathon produces or can produce. Later in this chapter, we will return to this with a case example from the CHI4Good Day of Service hackathon.

Some of the examples of hackathons and hackerspaces which have re-politicised the format and who work to be more intentionally liberatory and inclusive are: DiscoTechs, Occupy Data hackathons, MigraHack, Trans*H4CK, Our Feminist Futures, Mz Baltazar's Laboratory in Vienna, Mothership Hackermoms, Seattle Attic, Flux, Double Union, Hacker Gals and the Make the Breast Pump Not Suck Hackathon and Policy Summit — that we will hear more about later (Costanza-Chock, 2020; Toupin, 2014).

Feminist hackerspaces

For more than two decades, scholars have asked questions such as "Where are the women hackers?", "Why are there so few women hackers?" and "Are there any women hackers?" (ibid). It has often been suggested that women simply are not interested in technology (Gates, 2019; Toupin, 2014) — a myth many researchers and technologists have debunked through the years. Instead, studies have shown that the hacker ethic is not a set of uniform values and practices but a heterogeneous landscape.

"The creation of feminist hackerspaces is about the reconstruction and reconfiguration of what feminism means in a hacker, maker and geek context. It is about differentiation, coalition and agency. It is about hacking hackerspaces and all associated concepts"
(Sophie Toupin, 2014)

Over the past couple of decades, a movement has developed in the United States to create and foster specifically feminist hackerspaces. While there is still somewhat limited academic literature on this topic, a study by Sophie Toupin knowledgeably summarises the development in the years leading up to its publication in 2014. In the study, she describes how "new models of hackerspaces seemed capable of narrowing the gap between hacker and feminist cultures" and argues that feminist hackers are in many ways leading the development of opening up the hacker ecology to further diversity and nuance (Toupin, 2014). In addition, Toupin has identified several causes for the emergence of feminist hackerspaces, namely: conflicts inside mainstream hackerspaces; conflicts over the meaning of openness; difficulties in recognising and acknowledging privileges along the lines of gender, race, ethnicity and class; and patriarchal behaviours (ibid).

According to Toupin, it is impossible to pinpoint one specific cause of motivation that provoked the emergence of feminist hackerspaces. However, she states that "it is safe to say that feminist hackerspaces can trace their genealogy to a dual source, to both hacker and feminist cultures" (Toupin, 2014).

3.4.4 Changing the Understanding of What Can Be Produced in a Hackathon

Previously in this chapter, we familiarised ourselves with the problematic nature of tech-solutionism. As a participant from #MoreThanCode stated: "You can't just come up with an app and solve the world's problems" (Costanza-Chock et al., 2018). We discover that we need "more than code" to address systemic issues, but what exactly is that more?

In their article "The Personal is Political: Hackathons as Feminist Consciousness Raising", D'Ignazio et al. (2020) ask the following question: What is the value of gathering in this way? A study of the CHI4Good Day of Service hackathon in 2016 attempts to answer this.

The CHI4Good Day of Service hackathon was a philanthropic hackathon hosted in California, United States, in 2016, bringing together 100 volunteers and 34 non-profit organisations. The event was promoted for participants in the 2016 ACM SIGCHI Conference on Human Factors in Computing Systems to "leverage their skills to make an impact" (CHI4Good, 2016). The hackathon lasted eight hours and allowed volunteers to rotate teams based on personal preference or availability throughout the event. Some volunteers took part in several projects, while others spent the entire eight hours working on the same project. The research was conducted after the hackathon, where 22 hackathon representatives were engaged in semi-structured interviews. Porter et al. (2017) describe the results of the hackathon in the following categories: artefacts, technical expertise, design process experience, social networks, affect, and hackathon identity:

- **Artefacts** refer in this case mainly to digital artefacts, such as prototypes, wireframes, visual mockups, or a document outlining "next steps".
- Several interviewees brought up **technical expertise**. However, it was mainly in the context of insufficient technical expertise to solve the challenges given within the minimal timeframe.
- Several interviewees expressed that the **design process experience** had been an essential element of the event. Most projects proposed by the organisations did not fit the timeframe and skillsets of the volunteers, so many teams had to pivot and reframe their projects, which in the end served as a valuable insight for the non-profits.
- The potential to produce more extensive **social networks** is often a big motivator for hackathon participants. Participants in this event described new connections between non-profits and volunteers, among volunteers, between organisers and non-profits, and between organisers and volunteers.
- **Affect** emerged as a rather unexpected and abstract product of the event. Terms like "energy," "fun," and "good feeling" were used to describe positive affect, while "awkward," "uncomfortable," and "frustration" were used to describe negative affect.
- The fluid and rapid nature of the event allowed the volunteers to explore their **hackathon identity**. The process of understanding the goals, experiences, and motivations of other team members helped participants navigate how they might contribute to the project. Project skill-matching was a critical element of the construction of these identities. As a result, some participants expressed frustration about the hierarchies that emerged within teams as participants working in senior positions tended to feel like they should have the final say. This dynamic created an uneven power distribution in teams composed of everything from students to senior managers (Porter et al., 2017).

Feminist hackathons as consciousness-raising

As we recall from the Feminism(s) chapter, feminist consciousness-raising groups were an essential element of the so-called second-wave feminism in the United States. The gatherings primarily "[aimed] to help women understand that their situation was not unique or uncommon, but was rather rooted in general, structural and systemic processes" (Toupin, 2014). Similar to what we are now seeing with feminist hackerspaces, the consciousness-raising groups, too, had a shared set of values that included creating a safe space for discussion and mutual learning. The awareness of the contestations regarding the dominance of white feminists and the issues of white feminists in these groups, combined with their own lived experience of being marginalised in the hacker culture, seems to have led several feminist hacker groups to internalise an intersectional and anti-racist approach to feminism.

In addition to the six results described by Porter et al. (2017), D'Ignazio et al. (2020) argue that hackathons also have the potential to function as spaces for feminist consciousness-raising. In sharing personal experiences, thereby recognising the systemic nature of the issues, members and participants in these spaces come to build solidarity and organise toward political action. Thus, it can be argued that in the same way feminism is a way to bring PD back to its political roots, it is doing the same for hackerspaces.

3.4.5 Acknowledging Tensions in a Feminist Hackathon

The following case is based on the ongoing collaborative project on post-partum health design by the Make the Breast Pump Not Suck Collective at the MIT Media Lab in the United States. Based on their experience organising several hackathons, Catherine D'Ignazio asserts the following four tensions between HCI research, social justice aspirations, and grassroots politics: History and trust; Money; Time; and Expertise (D'Ignazio, 2019).

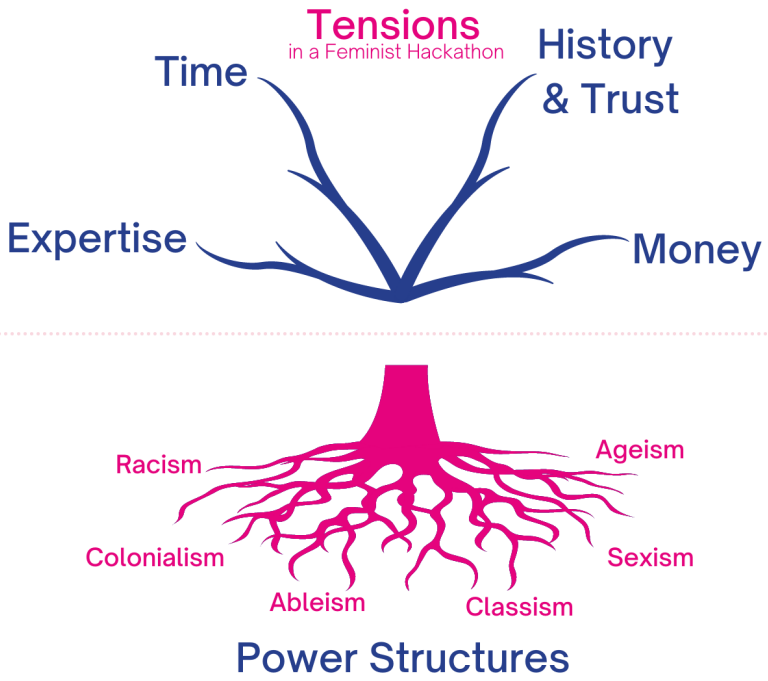


Figure 3.16: 'Tensions in a Feminist Hackathon', inspired by the work of D'Ignazio in Four Tensions Between HCI Research, Social Justice Aspirations, and Grassroots Politics (2019).

Tension: History and trust

When working with communities that have been historically marginalised and oppressed, trust will be the first to be addressed. Through their interaction with a partner organisation, the collective learned that many academic researchers before

them had come to extract information from the community — never to be seen again. This insight made the collective realise the importance of implementing structures that enabled the communities most impacted by breastfeeding inequities to be present at the hackathon.

These learnings regarding history and trust prompted the following questions:

- "How do we take responsibility for a flawed history of academic-community interactions?"
- "Could using anti-oppression frameworks in HCI* actually be more harmful than traditional models because they lead to researchers relying on moral superiority ('trust us — we are some of the good guys') and inauthentic horizontal treatment ('we are the same as you') while failing to recognise the very real differences in identity, power and money that are at play?" (D'Ignazio, 2019, p. 3)

** In the open questions for the four tensions, HCI can be replaced with any relevant discipline. In our case, that could, for example, be design or urban planning.*

Tension: Money

The collective's association with the MIT Media Lab made funding the project a relatively straightforward process. When they needed more money, they essentially just had to ask for it. While this served as a massive benefit for the team, it also led one of their Advisory Board members, a Black woman with decades of professional experience, to express frustration that the process was so easy for them. This led the team to discover that she had seen several other community-based organisations, herself included, apply for funding for similar projects through the years without ever receiving funding. The privilege of being associated with a big institution like MIT became as clear as ever, which provoked the following questions:

- "What do anti-oppressive funding models (that still involve academics or academic institutions) look like?"
- "Can people in HCI leverage racial and institutional privilege without reinscribing it?" (D'Ignazio, 2019, p. 4)

Tension: Time

The third tension came from the lack of time. The collective spent a year organising the hackathon, building relationships with communities and organisations, and still did not think it was enough. This thought made them wonder if they were taking the time the project needed or forcing the project to adapt to their schedule. D'Ignazio explains: "We found that working in an equity-centred model consistently demanded far more time and emotional labour than we had previously estimated. As director of this project, I feel that many people who worked on it, including myself, were not adequately compensated for the amount of additional time and emotional labor that they contributed" (D'Ignazio, 2019, p. 5). Reflecting also on the implications this had for the outcome of the research, D'Ignazio asked herself:

- "What are our long-term goals? And how do we move slowly, capaciously and sustainably towards them?"
- "How do we think beyond and outside of the timelines of single projects?"
- "What might HCI research stand to gain if we prioritised (and rewarded) long-term thinking and long-term relationship building?" (D'Ignazio, 2019, p. 5)

Tension: Expertise

The final tension came through the fact that the team encouraged the participants in the hackathon to think beyond computation. As we know by now, that is the opposite of what often is at the centre of a hackathon. For example, D'Ignazio explains that a group of Native women modified their ceremonial regalia to make it more breastfeeding-friendly. This led to the tension of expertise: How would the organising team determine when its expertise in HCI would be valuable and encouraged —

and when they should back off? In addition, because HCI is grounded in creating computational systems, tension arose between short-term harm reduction on one end of the scale and long-term dismantling of structural barriers on the other. This tension prompted the following questions:

- "If/when HCI needs to move out of the way, what role does the HCI researcher/designer play?"
- "What is the role of HCI research and design in dismantling structural oppression?"
- "How do we connect design ideas to structural forces? How do we balance harm reduction and long-term, transformative justice?" (D'Ignazio, 2019, p. 6)

3.4.6 Making the Implicit Explicit

A key finding for Hope et al. (2019) has been the role of *joy* and *play*. By focusing on experience design "where joy and play serve as key strategies", they have been able to forge a new model that offers a kinder, more inviting and spacious hackathon experience.

As highlighted by the following quote, a feminist self-reflexive practice has led this member of a feminist hackerspace to realise that simply advocating for intersectionality is not enough if the space or organisation is not explicitly designed to be equitable and inclusive:

"The same issue that we see in feminism as a whole we see it in feminism and tech. It is dominated by white cis-women like me, middle class like me who are in these very privileged positions and dominate the conversation and who are given more space to talk about the issues that affect them. Within feminism, we had a huge marginalisation of anybody who did not fit in those specific spaces. Women of color, women with disabilities, trans women, genderqueer women, native women, all on the gendered spectrum" (Toupin, 2014).

Therefore, D'Ignazio et al. assert that only by intentionally structuring equity may the quality of pluralism be realised — a space in which multiple voices and perspectives are valued and where the voices of those who experience the structural forces of oppression first hand are in the centre. This, they claim, "may be one of the key differences between what we might characterise as mainstream hackathons and feminist hackathons—the former works to limit group-based differences so as to generate technical products quickly and the other seeks to intentionally surface and navigate differences so as to build a broad political vision more slowly" (D'Ignazio et al., 2020).

This intentionality of making the implicit explicit also relates to the title of our hackathon: Feminist Futures Helsinki hackathon. With the choice to use the word Feminist front and centre, we made an explicit political stance, and perhaps more importantly, by doing so, by naming it, we claimed its existence.

3.4.7 Hackathon Culture in Finland

The previous sections have discussed definitions, critiques, and possibilities of the hackathon model. In this chapter, we will describe three of the hackathons in Finland. The Finnish context is interesting to study feminist hackathons because the country has a long history of being recognised as one of the world's most equal and technologically advanced.

In 2002, sociologist Manuel Castells and philosopher Pekka Himanen explained how Finland could be considered a precedent for avoiding following dominant narratives in development that amplify social injustice, like the "Silicon Valley" narrative (Castells

& Himanen, 2002; Himanen, 2004). They claimed this was because Finland had managed to combine economic and technological development with the welfare state, thus strengthening the country's identity and political legitimacy (Castells & Himanen, 2002). Furthermore, the authors declared that there are no one-size-fits-all information society models but that every model could be combined with different socio-political characteristics (ibid.). More specifically, every model is created through the values private and public entities prioritise and put forward (ibid.).

How do these values appear now, 20 years later, in the context of the popularisation of the hackathon model as places of technological innovation and networking and amidst the same dominant narrative of high equality and technological development? As most of the literature we found about hackathons was contextual to the United States, and we did not have access to much literature on hackathons that happen in Finland, the analysis of the hackathons comes primarily from desktop research.

We have identified two types of hackathons in Finland. The first type is those that seem to run on an ongoing basis, mainly once a year. The second type is those that take place sporadically and react to a more spontaneous situation — such as hackathons that happened as a response to the Covid-19 crisis. In this section, we will only describe the ongoing ones: Junction, Ultrahack, and Dash.

Junction

Junction is a non-profit and volunteer-based event organiser founded in 2015 in Helsinki, Finland. In 2018, they launched JunctionX, their global hackathon program, expanding to 10 different countries. Their website describes itself as "Europe's leading hackathon", which runs yearly and gathers around 1500 hackers for a weekend. It is "a meeting place for developers, designers and other techies, teaming up and creating new tech projects in 48 hours" (Junction, n.d.).

Junction's website markets hackathons to organisations as places where they can enhance their value and get fast and fresh solutions to their challenges. However, information about design processes, the scope of topics or ethical guidelines does not appear on the website. In addition, although increasing corporate value and visibility by joining the hackathon as a partner is also explicitly promoted, we did not find information regarding the profile of companies that participated in the past.

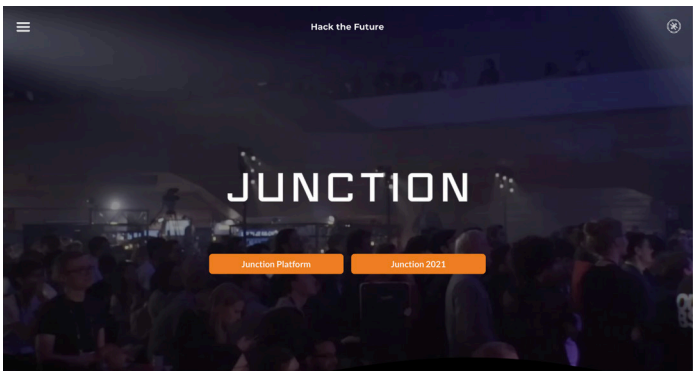


Figure 3.17: Screenshots from the Junction hackathon website.

It is also communicated to partners that the event is a great place to find talent and potentially hire employees because "Hackathons are a great place to get first-hand experience on the team-work, project management and technical skills of the participants." (Junction, n.d.). However, in the communication for participants, we did not find any hint suggesting that companies might evaluate participants as potential employees on those aspects, nor anything that suggests that a hackathon is a place where they can get hired or find employers.

In the "why you should join" for participants, Junction shares: "If you're into tech at all, it is the place to be – a full weekend of hacking with thousands of other tech heads in an atmosphere and spirit like no other. An experience you do not want to miss out on." (Junction, n.d.). The discourse is similar for the communication towards volunteers, for whom the primary motivation to join would also be to be part of the community and experience the atmosphere.

Being part of the event and experiencing the atmosphere is highlighted repeatedly. However, we did not find further descriptions of what that atmosphere consists of or what values Junction stands for.

Ultrahack

Ultrahack is an organisation that combines an innovation platform with hackathons and accelerators. They partner with a series of public and private organisations to offer challenges for participants to apply on an ongoing basis. Instead of concentrating all the challenges and participants simultaneously, there are several challenges to "hack", each with its own time limit, requirements, and application guidelines. Although Ultrahack also started in Finland, it appears that their challenges are hosted by international partners and offer the opportunity to host participants based in several locations. Now, all the challenges happen online, but before the Covid-19, they developed in different locations.

The motto of Ultrahack is "Solving global problems with open innovation" (Ultrahack, n.d.). It can be understood from the name of the challenges that some of them tackle global sustainability issues, such as dealing with plastic waste or reducing emissions. However, every challenge's amount and type of background information is left for every organisation to decide. Consequently, it is also not clear if there is a set of values, ethical framework or shared vision that applies to the process of those who participate in Ultrahacks.

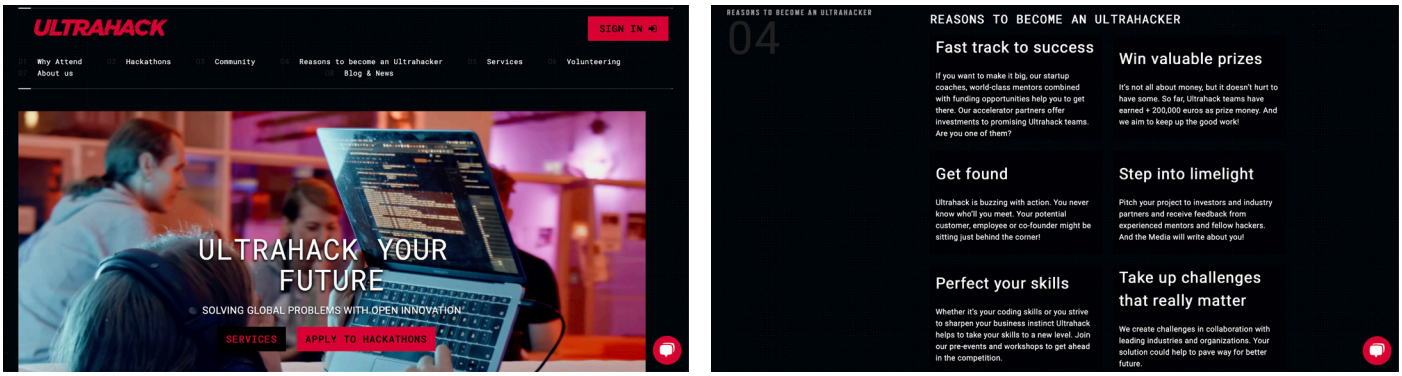


Figure 3.18: Screenshots from the Ultrahack hackathon website.

The way organisations frame their challenges also influences how participants are targeted. For example, some challenges require teams of a specific number of people from a specific country in the world. Others encourage professionals and startup founders to apply, and others are open for anybody worldwide to apply. When it comes to labour in hackathons, something worth mentioning is that Ultrahack, Junction and Dash all offer ECTS credits for university students. So although university students might not be the only participants who attend the event, such an approach offers compensation for that group.

Overall, we believe that the variety of organisations, challenges, and participant requirements can reach people with different backgrounds and expertise. However, the fact that there are no explicit values, codes of conduct or information on the ethics of the process can contribute to the critiques presented earlier to be present too.

Dash

The Dash hackathon started in 2017 as the initiative of two students from Aalto University as a way to tackle a big problem: "businesses and startups kept on growing in Finland, but something vital was commonly left out — design" (Dash Design, n.d.). In that sense, they entered the hackathon scene with an apparent distinction: the event was design-based.

This shift in the hackathon focus, from "programming" to "design", also allowed various backgrounds to participate. Their website explicitly calls students, graduates, and professionals of all fields — not only people from tech backgrounds. Nevertheless, it seems that that diversity is restricted to diversity within academic and professional circles. It is not explicit if people outside of those circles belong or are welcome there.

In the past, Dash has partnered with private companies as well as municipalities in Finland. The event encourages applying a design-service approach to the partners' problems, and therefore, the challenges are framed around corporate rather than societal challenges.

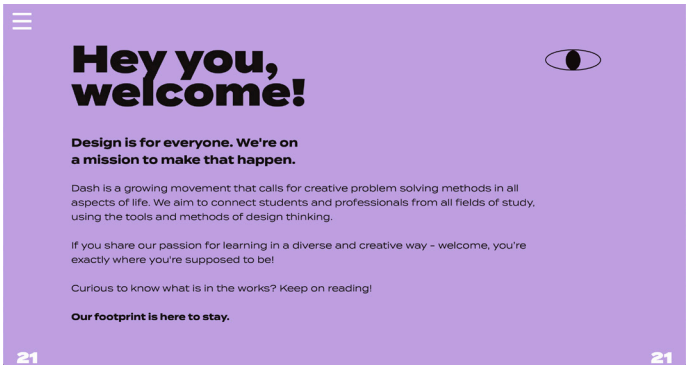


Figure 3.19: Screenshots from the Dash's hackathon website.

Dash communicates the benefits of using design methods as positive for increasing corporate value. For example, the partner section reads, "(...) we believe design thinking methods can take your business to a new dimension. Good design is essential for standing out in competition, and it is proven that design-oriented companies outperform their counterparts in terms of revenue" (Dash Design, n.d.). In addition to better insights through design, Dash also highlights for partners their opportunity of recruiting new talents and strengthening their company branding (ibid.).

Something extra to highlight is that information on the schedules of activities, breaks, type of food offered, and the availability of mentors and partners is also publicly available.

3.4.8 Recap

Hackathons are events where people come together in teams and "hack" problems to develop innovative solutions. It is often associated with technology and entrepreneurship, but an increasing tendency has shifted hackathon agendas.

This shift has appeared as a response to the criticism raised against hackathons like:

- Hackathons tend to encourage (tech) solutionism and short term ideation over long term impact and system change;
- They are exclusive and often 'unintentionally' reinforcing systems of oppression;
- They encourage the exploitation of young people through unpaid labour.

Feminist hackerspaces have contributed to an expanded understanding of what can be produced in a hackathon, including outcomes such as 'affect' and 'hackathon identity'. Furthermore, research from MIT has identified four tensions that are present in so-called hackathons for good, namely history and trust, money, time, and expertise. The hackathon scene in Finland seems to be known and quite established. Although most events only target people from a tech background, there are growing trends of introducing multidisciplinarity. However, this multidisciplinarity is mainly considered to add value to the corporation that owns the challenge more so than the communities affected by the issues at hand.

3.5 The Gap in the Field: Where Do We Fit In?

The way we perceive the world of hackathons is a world of flawed history and great potential, much like the rest of the world. In this literature review, we have discussed how feminism can enhance built environment concepts and participatory design methods and the potential to bring political value and critique to increasingly depoliticised fields. The narrow understanding of value in the real estate field and the global trends of neoliberalism put at risk the welfare state in societies. In addition, its disconnection from situated and participatory practices results in a lack of sensitivity that prevents the sector from successfully responding to global challenges. Participatory disciplines and hackathons have strongly developed sets of tools but are sometimes lacking in ethos. Feminism, on the other hand, has a strong ethos, but the academisation of feminism has left it sometimes starved of its activist roots.

"If the master's tools can never be used to dismantle the master's house, as Black lesbian feminist writer, poet, and activist Audre Lorde stated so powerfully, can hackerspaces, makerspaces, fablabs, and hackathons be sites where we develop new kinds of tools?"
Sasha Costanza-Chock, 2020

We see great potential in developing and testing models that bring participatory methods and feminism together in ways that enable those models to be applied to a multitude of topics — and this is where we fit in. Rather than identifying a gap in the field, we see this work contributing to a growing body of work that explores the potential of creating more inclusive and accessible hackathons, adding valuable insights from Finland. In addition, we believe insights gained from applying the concepts explored in this literature review in different geographic locations will increase the understanding of the possible value production of hackathons.

Chapter 4

Case:
Feminist Futures Helsinki Hackathon

4. Case: Feminist Futures Helsinki Hackathon

Figure 4.1: Landing page of the Feminist Futures Helsinki website.

4.1 Introduction

This chapter introduces a thorough recount and analysis of the Feminist Futures Helsinki hackathon 2021, reflecting on its organisation (before), its unfolding (during) and its impact (after).

Section 4.1 introduces the premise of the hackathon, our team, the partner and participant profiles, and the 12 projects that resulted from the hackathon.

Section 4.2 outlines the organising process through the account of the 11 design principles that we established and used to guide our decision-making. These principles, we believe, have been fundamental to the format and impact of the hackathon.

Section 4.3 describes the activities and events that took place during the hackathon, such as the public programme, meditation, mentoring, the halfway feedback form, and the joint sessions. In addition, we also introduce the toolkits that we provided for the participants.

Section 4.4 outlines the perceptions of the hackathon as described by participants and partners alike in interviews and surveys.

Finally, **section 4.5** dives into four selected project cases from the hackathon to offer a closer look at the work that emerged from the hackathon. These cases also serve the purpose of showing the breadth of topics that this hackathon format can be applied to.

At this point of the thesis, the FFH hackathon has already been mentioned many times. However, for the sake of clarity, this section will offer a more detailed description.

The Feminist Futures Helsinki (FFH) hackathon 2021 took place online between May 15-31, 2021. The creation of the hackathon began towards the end of the course Critical AI and Data Justice in Society, led by Prof. Nitin Sawhney and assisted by researcher Sid Rao and designer Henriette Friis (co-author of this thesis), and attended by Eva Duran Sánchez (co-author of this thesis). During this course, we engaged with Catherine D'Ignazio, American author, artist, software developer, professor at MIT, and one of the organisers of the hackathon Our Feminist Futures hosted online in the United States during May 3-30, 2021. Several of us were interested in taking part, but participation was limited to American residents. One thing led to another, and soon we had established our team in Helsinki, had a meeting with the team from MIT, and organised a visioning session to plan what we wanted to create. We quickly started contacting potential partners. We knew from the beginning that we wanted to work with grassroots and community organisations rather than big companies with deep pockets.

4.1.1 Feminist Futures Helsinki Hackathon (in a Nutshell)

Who?
50 participants
21 partners
10 organisers

When?
May 15-31 2021

Where?
Online (Zoom)

What? A **hackathon** with four tracks / 12 projects:

Urban Futures: (1) Cities Built for the People, (2) Inclusive Lapinlahti, (3) Loneliness-Free Cities

Inclusive Futures: (1) Reproductive Justice: Surrogacy, (2) Improving Immigration Processes, (3) Enabling Age-Inclusive Participatory Communities

Well-Being Futures: (1) Dreaming of Feminist and Anti-racist Internet in Finland, (2) Supporting Persons Experiencing Gender-Based Online Harassment, (3) Sustainable Activism

Eco-Justice Futures: (1) Intersectional Climate Movement, (2) Strengthening Sámi Allyship, (3) Spaces for Dialogue for Climate Change

Figure 4.2: The Feminist Futures Helsinki hackathon (in a Nutshell)

4.1.2 Our Team

Our team fluctuated in size throughout the process. Some people were with us from beginning to end, others only in the beginning or end. In total, there were ten people involved in organising the event, including ourselves. Some focused on communication and social media, some on facilitation, and others on helping to apply for funding and look for sponsorships. We (the co-authors) coordinated the team, distributed tasks, contacted partners, developed the project ideas with partners and set up the public programme.

In our experience, having diversity in our team was crucial because it allowed us to include perspectives from different fields. We were very fortunate to have people on our team who...

- Had expertise in Information Security and Human-Computer Interaction (HCI), and who could advise us regarding GDPR and data storage;
- Had experience from organising hackathons;
- Had experience with visual design and communication strategies;
- Had experience with managing and coding big data sets;
- Had experience with organising and facilitating workshops;
- Had experience with grant applications;
- And much more.

Needless to say, we could not have done this without the skills and support from our team. Beyond having different educational/professional backgrounds, we also represented many different countries and cultures; between the 10 of us, we could speak more than 15 languages.

4.1.3 Participant & Partner Profiles

Participants

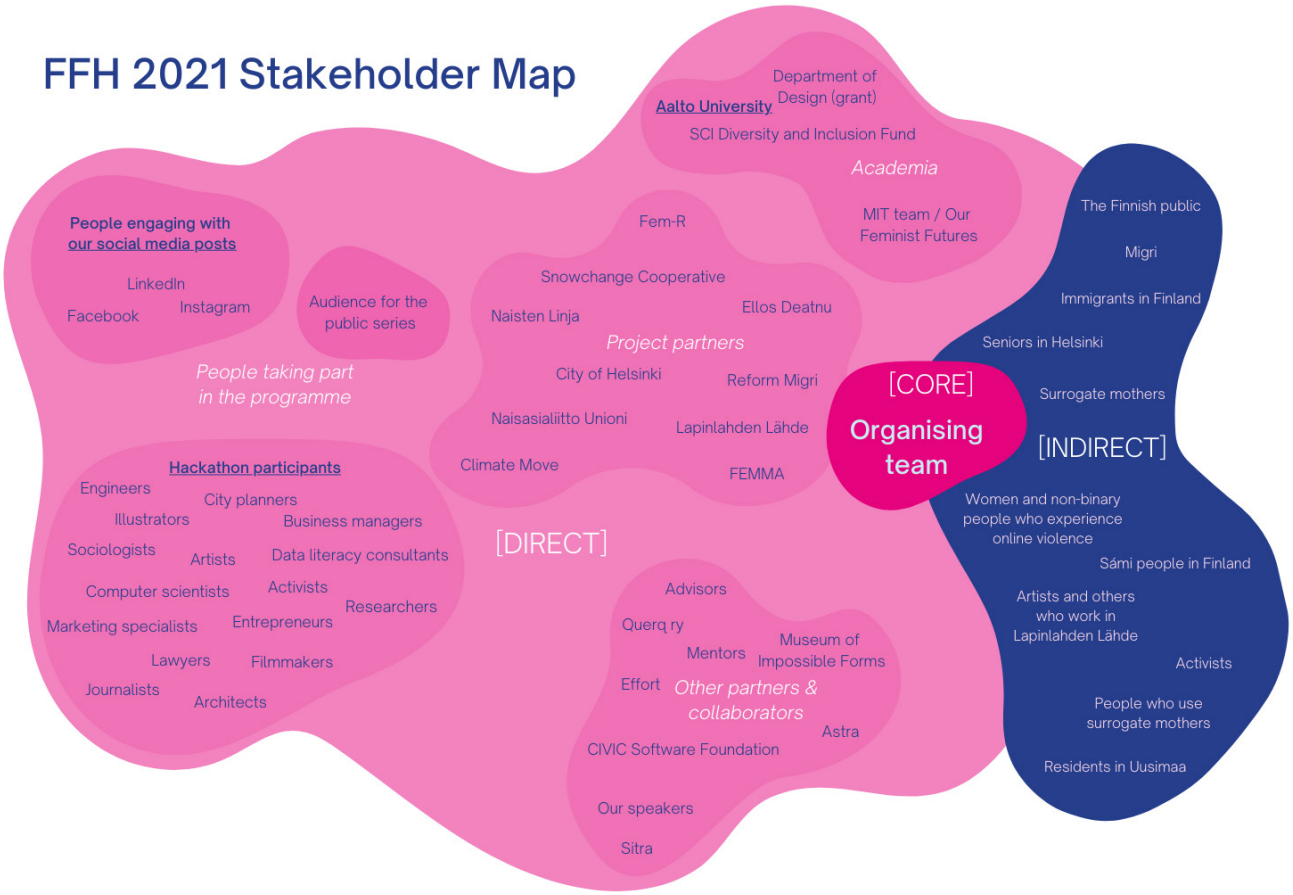
Out of the 90 applications we received, we selected 52 participants with many diverse backgrounds. They were engineers, illustrators, artists, city planners, activists, business managers, entrepreneurs, researchers, marketing specialists, journalists, architects, lawyers, computer scientists, data literacy consultants, sociologists, and filmmakers. We were very intentional about the participant demographics and prioritised ethnic diversity, gender and sexual diversity, educational and professional diversity, and age diversity. We did this in order to prioritise people who would usually not take part in a tech-based hackathon. We also favoured people who expressed strong motivation.

Partners

Partners were organisations and individuals who engaged with FFH in three main ways:

- **Project and track partners** were community and grassroots organisations, consulting companies, associations, and one municipality. They co-created the tracks with FFH and defined the project ideas that the teams would work on. Project partners were also responsible for mentoring their own teams once a week.
- **Non-track related mentors** were individuals and organisations with experience in feminist design, community work, anti-racism, and other skills that mentored teams along their process.
- **Speakers** were individuals and representatives of organisations who shared experiences and knowledge material to the FFH topics and vision.

Figure 4.3: The Feminist Futures Helsinki hackathon 2021 Stakeholder Map.



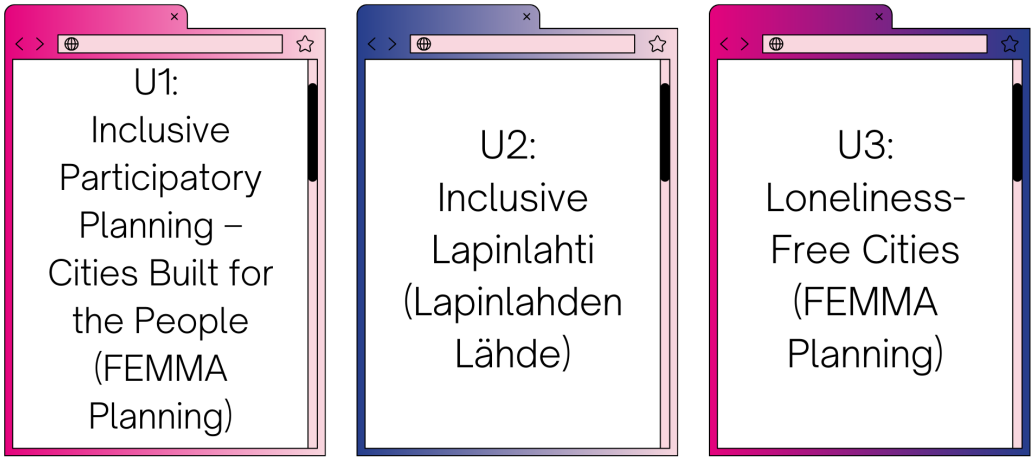
4.1.4 Introduction to All 12 Projects & Feminist Justifications

We realised that while we, the organising team, could see the connections to feminism for each project, this was not always the case for the participants. For example, in an interview after the hackathon, a participant expressed confusion about the topic they had been working with because they did not consider it a feminist issue, suggesting that "(...) if you could mention somewhere on the website: 'not just related to the title [Feminist Futures Helsinki] but other stuff also surrounding it'. Then participants come prepared" (FFH participant, interview, June 4, 2021). Although this feedback surprised us, it was essential learning as that is an important thing to communicate to avoid expectations not being met.

The first thing we could have done to avoid that situation would be to explain our understanding of what makes a project feminist, based on the book *Data Feminism*. In the book, Catherine D'Ignazio and Lauren F. Klein state that "a project may be feminist in content, in that it challenges power by choice of subject matter; in form, in that it challenges power by shifting the aesthetic and/or sensory registers of data communication; and/or in process, in that it challenges power by building participatory, inclusive processes of knowledge production. What unites this broad scope of data-based work is a commitment to action and a desire to remake the world" (D'Ignazio & Klein, 2020).

The second thing, which is what we have done now, would be to provide our take on the connection to feminism for each of the proposed projects, explaining why the issues they deal with are indeed feminist issues. The following table is a gross simplification of a collection of very complex topics. We acknowledge that we will not capture every aspect of every project in just a few sentences. However, it will hopefully help to understand where we, in this case, meaning the organisers and partner organisations, were coming from. What we are saying is basically this: *Feminism is relevant in all these different spaces.*

Urban Futures



	Project	Why is that a feminist project?
U1	Even if people can participate in urban planning, participation does not automatically mean that the city becomes more inclusive. Therefore, this team dealt with questions such as: How can urban planning better consider people who are often excluded from decision-making?	Feminism asks: Whose safety, transit routes, livelihood, and pleasure is prioritised? Who has the right to the city, and how might minoritised groups reclaim agency over city planning and governance?

U2

The people at Lapinlahden Lähde have a vision for the old hospital to become a safe and inclusive centre for well-being where all community members can come to relax and engage with a diverse range of arts and cultures. They also hope the values of Lapinlahti can somehow spread to other parts of the city through collaborations.

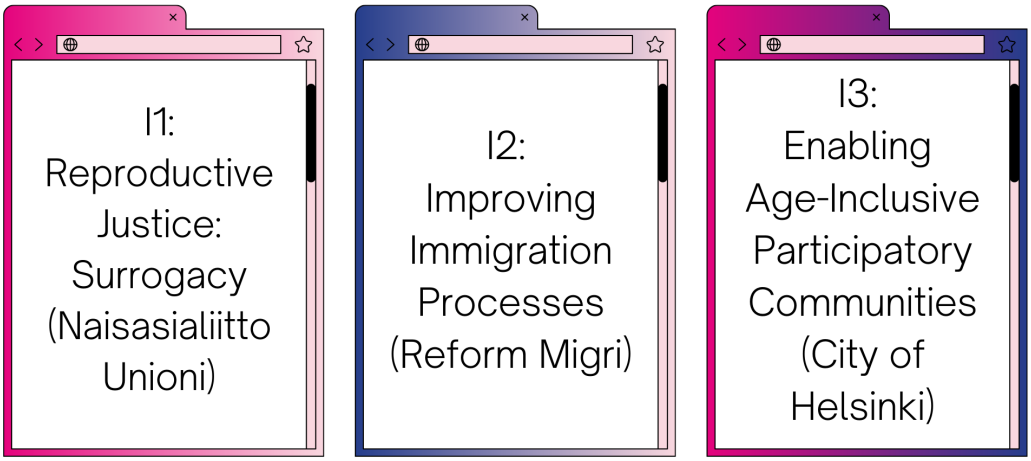
Making sure that public spaces are accessible for people of all ages, abilities, incomes, etc., is a feminist issue. Feminism asks: How might we better support the community to have agency? How might our environment better support our mental health?

U3

Loneliness has long been an issue in cities, and COVID-19 certainly has not improved the situation. So how can we plan for loneliness-free spaces or spaces that enhance social possibilities without forcing anyone to be under social pressure?

Loneliness is an epidemic of mental health, and mental health is a feminist issue because it is experienced differently depending on your intersectional identity (gender, race, age, income level, etc.). This project is an excellent example of why feminism is not just "women's issues".

Inclusive Futures



Project

Why is that a feminist project?

I1

Imagine an equitable reproductive policy – how might you create equal policies for conceiving, childbearing and childbirth for all birthing parents regardless of gender identity, class, social standing, ethnicity and body type. Consider the ethics of concepts such as surrogacy and egg and sperm donation.

The right to your own body is a central feminist principle, yet the rights of the surrogate mother are not protected in many countries. In addition, patriarchal ideas about family structures, gender, and sexual minorities impact to whom surrogacy is available and how the individuals involved are protected under the law. Uncovering institutionalised power dynamics in reproductive justice is a feminist action.

I2

Many migrants struggle with Migri (the Finnish immigration service provider) when arriving in Finland. Therefore, a petition was

The discourse on immigration in many Global North countries such as Finland is usually dominated by

launched to set up an inclusive and diverse external committee to monitor the process. Representatives of different groups, e.g. student unions, entrepreneurship society, asylum seekers, and artists, would then ensure that the needs of their communities be taken into consideration for future policy-making and service redesign.

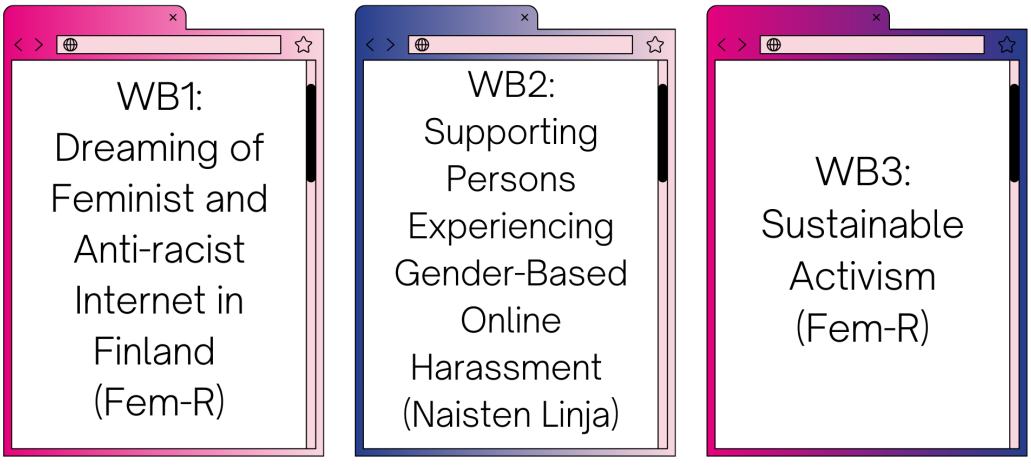
narratives around 'integration' and 'becoming active citizens'. However, the process often fails to see these individuals' value and instead aims to erase differences to create a uniform population. Feminism asks: Who gets to define a culture? How might we actively work to dismantle the privilege that comes with being born in wealthy countries?

I3

The City of Helsinki was interested in finding out how they might better and proactively recommend volunteering for elderly or senior citizens in Helsinki. By doing so, both support and enhance seniors' physical, mental and social health and feeling of belonging also design future proof volunteer journeys. They asked: How can we support passive senior citizens to take action in their communities? Can we, as the City of Helsinki, facilitate this journey somehow? How do we ensure that seniors with different backgrounds are seen as individuals?

Age-inclusive participatory communities are feminist in that they challenge capitalist notions of worth (seniors are seen as unproductive and in need of help). By cultivating an appreciation for the value of residents of all ages, communities will thrive better because it expands the common understanding of each individual's value.

Well-Being Futures



Project

WB1

Fem-R wants to host a nationwide debate on Dreaming of Feminist and Anti-Racist Internet in Finland — keeping in mind that such conversations have taken place in the Global South for a long time. Therefore, this is an opportunity to amplify the activist voices from the Global South and for Finland to learn. Fem-R asked: How should the debate be organised, and what platforms should be used? How would we ensure an interdisciplinary approach in

Why is that a feminist project?

Although the internet has enabled a more democratised access to knowledge, it can also be a very harmful place. For example, minoritised people, because of gender or sexual identity, ethnicity, nationality, and more, are more likely to experience online violence and harassment. In addition, the technologies we use are designed to support the needs of dominant

the conversations? Would debate itself be sufficient, or can we magnify the scope?

groups. This all leads to questions about who can (or cannot) exist safely in online environments.

WB2

Turv@verkko is a service for women and non-binary people who experience online harassment and violence. The team providing the Turv@verkko services are struggling to reach the target audience that they want to help. The team at Turv@verkko asked: What creative ways could you imagine utilising to spread the information about the service? Consider how we could motivate women and non-binary people who have experienced online harassment to use our services. What are their needs? What are their concerns?

Similar to the previous project, this too is a matter of who is safe in the online space. This service targets women and non-binary people because they are statistically more likely to be harassed. In the organisation's experience, this leads to anxiety, fear, self-censorship, isolation, depression, and even suicidal thoughts.

WB3

Fem-R, being a volunteer-based NGO that does the majority of its activism online, has experienced challenges with activist burnout. For this project, they asked: How can we provide healing and support to those activists who suffer from digital violence that does not further burden an organisation that works on a volunteer basis? Could Fem-R perhaps offer training on navigating online spaces or what to do when someone experiences hate speech?

Rest as a form of activism is a feminist act. It resists the idea that activists are only valuable when they are on the street protesting or online spreading awareness. Most of the members of Fem-R are themselves minoritised people who already carry the burden of oppression. By finding more sustainable ways to be activists, they would protect their mental health and assert their value beyond their activism.

Eco-Justice Futures

Project

Why is that a feminist project?

EJ1

Climate Move (a climate activism organisation for youth) thinks that the climate debate in Finland should recognise and listen to different perspectives and voices, especially the voices of marginalised people and those whose lives

It is impossible to address the climate crisis equitably without social justice. Factors such as gender, race, class, abilities, migration status, Indigenous

will be most affected by climate change. They think that solving the climate crisis should be more inclusive and intersectional. How could Climate Move as a volunteer-based activist organisation contribute to this development here in Finland?

status, and country of residence exacerbate the effects of the climate crisis. Climate movements have to account for that. In addition, the vast majority of people displaced due to the climate crisis are women — and primarily Black, Indigenous, and women of colour.

EJ2

The Sámi people have long known and expressed the issues and solutions in the Nordic context regarding environmental justice. Nevertheless, the Sámi communities have been historically and systematically silenced. Being a minority, with only approx. 8,000-10,000 Sámi people living in Finland, their concerns and struggles are neither heard nor addressed in mainstream discussions. How might Sámi allyship be improved in Finland? What kind of support can non-Sámis provide for the communities?

Feminism is about equality, and Indigenous peoples and their parliaments do not have equal standing with colonial governments. Even though policies have been implemented in recent years to give the Sámi people more of a voice in decisions regarding Sápmi, the policies remain superficial and performative.
Due to the small population of Sámi people in Finland, becoming an activist is usually more a necessity than a choice. Therefore, allyship may play an essential role in carrying some of that burden.

EJ3

How might we create and maintain spaces where people can meet across generations, backgrounds and experiences, recognising the history of Finland but also looking to the future(s) of the environmental movement? That was how the team working on this project was prompted.
What kind of practices would help people stay sane in this new reality — seeing that the world as we know it is disappearing and seeing that something is coming which is alien to us.

Feminism tells us to recognise different types of knowledge and of sharing knowledge equally. In this case, that means acknowledging Indigenous land knowledge and expertise. It also tells us to centre the experiences of those most affected by the climate crisis.

Process

In the following sections, we will describe the process of organising, facilitating, and reporting on the FFH hackathon. We will introduce our design principles, the toolkits we developed, the programme, and the cross-pollination sessions. We will also be highlighting five of the 12 projects from the hackathon and reflect on insights from and perceptions of the hackathon based on interviews and feedback from participants and partners alike.

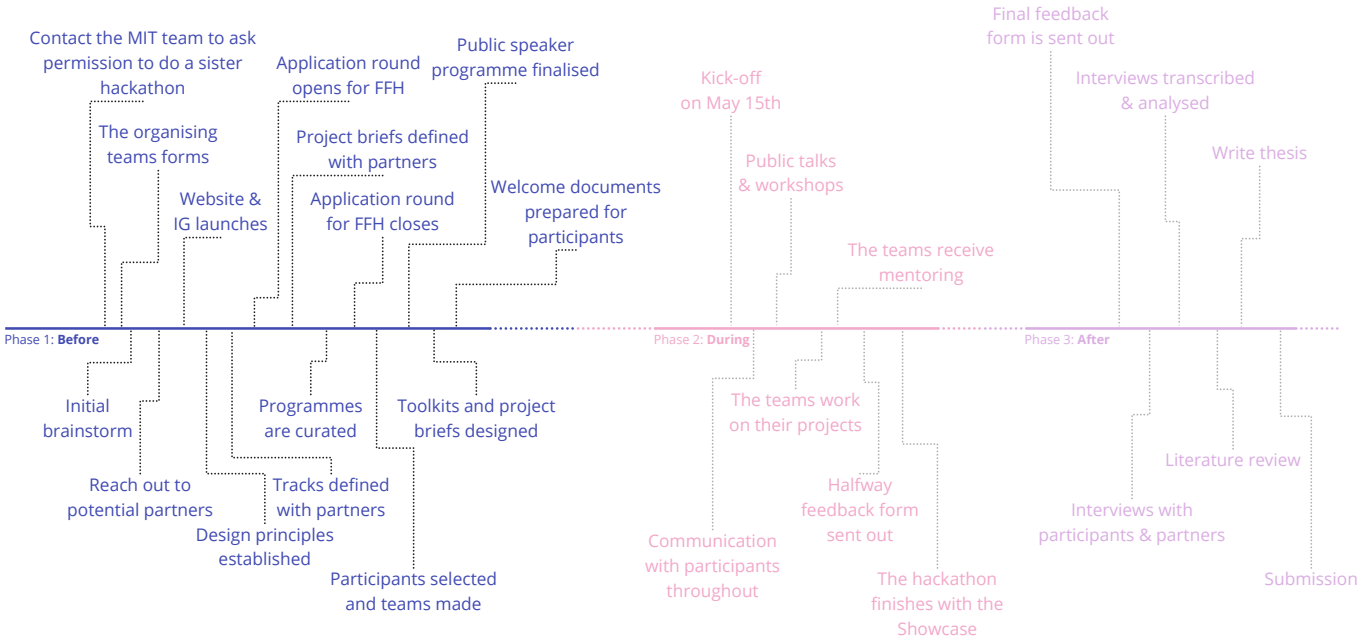


Figure 4.4: Feminist Futures Helsinki hackathon 2021 timeline. Phase 1: '*Before*'.

4.2 Phase 1: Before (Organising): Design Decisions, Values and Ambitions

In the following section, we will describe the process that took place during the almost eight weeks from the first brainstorm until the Kick-Off. We will also introduce the design principles that guided our decisions.

We started the process by having a visioning workshop with our team. In this workshop, we discussed questions such as "what do we want to do?", "why do we want to do it?", "who do we want to reach?", "what are the values we're trying to amplify?" and "what is missing from the Finnish/European hackathon scene?". These questions helped us align our goals quickly and make a plan for what was to come.

During this initial workshop, we also started brainstorming possible topics that could set the framework for the tracks. We talked about topics such as mental health, reproductive justice, trans* rights, community spaces, feminist technology, workplace balance, migrant rights, and health consequences beyond COVID — all in the context of Finland. We also talked about what kind of roles each of us wanted to take during this process and how much time we would each have to dedicate. The co-authors had by far the most time to dedicate, and for that reason, we took on more of a leadership role. However, as described in 4.1.2, each team member played an important role.

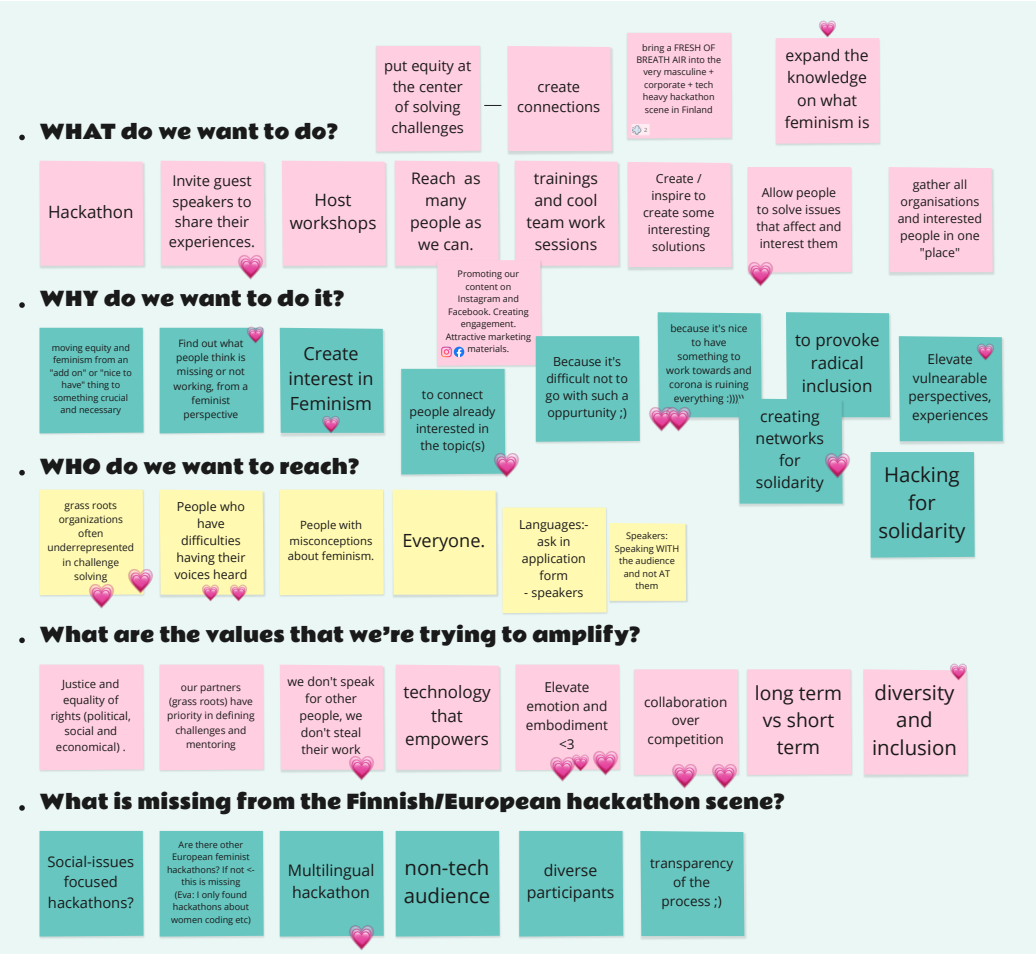


Figure 4.5: Screenshot from the FFH team's first brainstorming session. The image shows the team's answers to the questions: "what do we want to do?", "why do we want to do it?", "who do we want to reach?", "what are the values that we're trying to amplify?" and "what is missing from the Finnish/ European hackathon scenes?".

It was clear from the beginning that everyone in the team wanted to take feminism into action and apply it to every level of this hackathon. In the following sections, we will explain in detail how this was done. It also cannot be overlooked that this opportunity, for many of us, came at a time when we needed to feel connected to a purpose. After a year in the pandemic, many people felt disconnected and exhausted, and this project was an opportunity to bring back both connection and motivation. In addition to this, the previous year had also brought many existing conditions into the light of day in new and enhanced ways. The climate crisis, white supremacy, ableism, classism, the patriarchy — the list goes on. While the overall situation in Finland had not been as bad as many other places, it still left many with a sense of hopelessness. Watching the world on fire (literally, in some places) while confined at home, unable to do much except join yet another Zoom call, made many people feel anxious.

"Thank you for spending time with us. It's not only about the hackathon, but getting to know people interested in the same topics... It's difficult to do it online. It was a very gratifying experience and I was really craving it after the lockdown. Needing human contact" (FFH participant, interview, June 4, 2021).

When we decided to organise the hackathon, we wondered if people would even be up for yet another online engagement. Nevertheless, at the same time, we did feel an inspiration flourish amongst ourselves, and we were excited to share it with participants and partners alike.

Since we still had to limit face-to-face meetings, especially during the first weeks of organising, we had to utilise many digital tools to help us coordinate. For example, we met with our team as well as with potential partners on Zoom; we used Slack to update each other on progress and request help; we shared documents and developed

concepts in Google docs; we used Miro to brainstorm, visualise, and schedule; we managed the application process in Webropol; we contacted partners and leads for partnerships via email and phone; and we promoted the event on Instagram and Facebook.

We made many design decisions along the way that made the FFH hackathon 2021 stand out from the usual hackathons. Even though we never wrote a manifesto, these choices almost functioned as such for us, guiding us through a hectic process of swift decision making. The following section will discuss these decisions and why we chose to do things in our ways.

The following 11 design principles were the core of our operations and were developed along the way.

4.2.1 Feminist Futures Helsinki Design Principles

Figure 4.6: The Feminist Futures Helsinki Design Principles. These 11 principles guided the organisation of the hackathon and helped the organisers to keep themselves accountables to the team values.

Principle no. 1: Projects should come from grassroots and community organisations

As explained in section 3.4, in a hackathon, the challenges will often come from a big company that has paid a sum of money to have their problem addressed by several teams, who then compete to develop the best solution. So we thought: Who benefits from that framework? Companies, often tech companies, that already make significant sums of money. And then we thought: Who do we think should benefit? Well, whom better knows what needs attention than the people working on the ground with the

local communities every day? We believe that when community organisations get to set the agenda, it enables more equitable outcomes. So we decided that the projects should come from grassroots and community organisations. This was also in line with the motto from the Disability movement: "Nothing about us without us". The MIT hackathon, Our Feminist Futures, also went with this approach and partnered with five community organisations.

However, this also meant that we did not have the source of funding that a hackathon would usually have. So instead, we applied for grants within Aalto and ended up with a budget of €4500.

Finding and confirming partners was an iterative process that developed along the way but looked something like this:

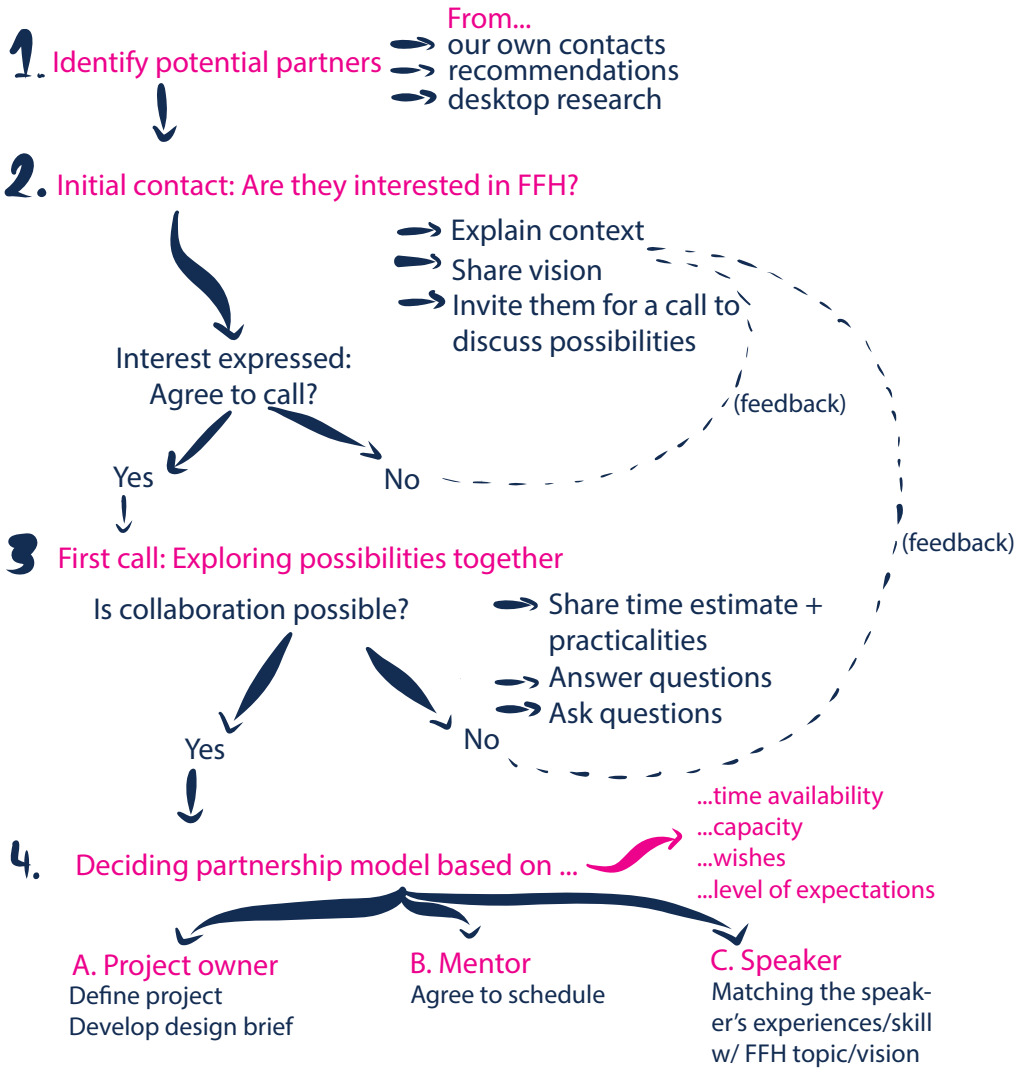


Figure 4.7: The process of establishing partnerships for the FFH hackathon.

We received feedback from some of the mentors about a need for increased clarity regarding expectations for mentoring. One partner stated:

"You need a clear idea about each mentoring session... Why mentoring now? What are the tools and resources that are relevant for this? Will there be a presentation and discussion, or another format? (...) I think with mentoring, you can do it at different levels. But I think it's about having more clarity from your side: What kind of mentoring do you want at which stage? And how do you inform that? Both to the people who are participating, as well as to the mentors" (FFH partner, interview, June 4, 2021).

Principle no. 2: We should prioritise having a plurality of voices and experiences: Several partner organisations per track and multiple mentors for each team
One key design consideration was to engage with a plurality of partner organisations, resulting in a diversity of project ideas and multiple mentoring sessions.

We decided that we did not want participants to work on topics that would encourage the idea that feminism is only about women's issues or gender-related oppressions. Instead, the projects should reflect the many types of intersecting systemic oppressions that can be questioned through a feminist lens, such as ecological justice, migration processes or the right to the city through urban planning. Therefore, instead of just having one project idea for all teams in the same track, we wanted to prioritise having a wide array of project ideas to showcase the diversity of societal challenges one can engage with using feminist tools and practices. As a result, 12 teams worked on 12 different project ideas in the hackathon, which ten partner organisations set.

Every team also had the chance to receive mentorship from at least three different mentors, in small groups or one-on-one. For the organising team, it was a priority to offer the teams the option of getting different perspectives and exposing the participants to the work of those individuals and organisations who offered to mentor. One participant pointed out the downsides to having multiple mentors that are not necessarily profoundly knowledgeable about the specific project the team is working on, saying that it sometimes felt more like they were "reporting" to the mentors rather than being mentored. This feedback made us think that there should be a better structure that easily lets mentors know where the teams are in their process and enables discussion starting from an informed baseline.

Another participant reflected on the mentoring in relation to the limited time frame:

"Mentoring has been very helpful and I like the choice of mentors. It was challenging though to participate in two mentoring sessions yesterday and today since it also takes away time from our team so that there was no time in these last days otherwise to develop our project between us. Maybe one less would have been better? (...) It's nice to share the process with others but I'm just thinking that maybe there's a way to not have to share everything multiple times during this short amount of time but instead focus on updating latest developments to some specific groups/mentors" (FFH participant, written feedback, May 23, 2021).

By matching every team with their unique project idea and connecting them to different project partners and mentors, we expected to contribute to building an atmosphere of collaboration rather than competition and ways of working that encouraged cross-disciplinarity rather than acting in silos.

Principle no. 3: The hackathon should last 2.5 weeks
A hackathon traditionally lasts somewhere between a few hours and a weekend and takes place during a weekend. Our Feminist Futures, the hackathon at MIT, lasted four weeks (the month of May 2021). Since FFH was born out of inspiration from Our Feminist Futures, we wanted to cement the connection between the two sister hackathons by overlapping timelines. To be entirely frank, deciding to host the hackathon in May was a dogmatic position we took early on, complimented by the sentiment of "if not now, then when?". Given our very short timeline, we decided that 2.5 weeks towards the end of May would be ideal for us to host the hackathon: A weekend to get into the headspace, followed by two full weeks of project work. That was the idea, at least.

It should be mentioned that the reason for the extended timeline was not only that we wanted to match what the team at MIT was doing. It was a decision also based on a

desire to counter solutionism that is so prevalent in the innovation scene. We wanted to accommodate participants with caring responsibilities and other time constraining responsibilities, making them unable to participate in a traditional hackathon.

As explained by Lykes and Hershberg: "Who does participate is, in many cases, who can participate. Specifically, the duration of an action project (i.e., more hours than a participant can spare from minimum-wage work or day work), its location at a distance from the duties of participants (e.g., away from the field or one's children), and participants' lack of skills to contribute to the report writing and analyses required of participatory and some action research are all obstacles that may have a negative impact on the ability of community members to participate" (2012, p. 360).

In a nutshell, complex topics, such as those we addressed in the hackathon need time to settle. Reflection, self-education, and discussion are essential elements to avoid superficial quick fixes, which in the end serves nothing and no one. We wanted to encourage the participants to immerse themselves in their projects and to be able to experience a variety of voices and perspectives, both through their project and through the public programme.

A feminist principle that we also wanted to ensure time for was for participants to understand their positionality within the topics they were exploring. We wanted them to ask questions rather than just look for answers. Furthermore, we wanted them to stay with the trouble. We wanted to encourage having hard conversations and, in the words of American professor, lecturer, author, and podcast host Brené Brown, to stay awkward, brave, and kind.

Principle no. 4: We should adapt to people's schedules instead of people adapting to us

To allow a diversity of participants to apply, we decided to adapt to the participant's schedule instead of having a fixed schedule for everybody. In the application, participants could share their availability to work with their team in terms of:

- Days and times of the week — multiple choice: (i) Monday-Friday from 9-17h, (ii) Monday-Friday after 17h, (iii) Saturdays, (iv) Sundays.
- Amount of hours per week — single choice: (i) 5-10h, (ii) 10-15h, (iii) more than 15h.

One of the criteria in the group formation was to group people who could work on the same days and for similar hours. We did that by offering flexible times and designing a system where people could meet in their groups to contribute to the hackathon within their availability. This choice was part of our ambition to better accommodate people with different caring, studying or employment responsibilities.

The FFH joint sessions were on Saturdays. The times of the other mentoring sessions were set by optimising the mentors' availability with the mentees' schedules.

While the intention behind this was good, in practice, it turned out to be a bit of a logistical nightmare. While it may have been possible to manage this better had we had more resources, it was far too time-consuming with the time, people, and money we had access to. We will reflect further on this in the discussion.

Principle no. 5: The hackathon should attract and reach participants beyond academia and tech

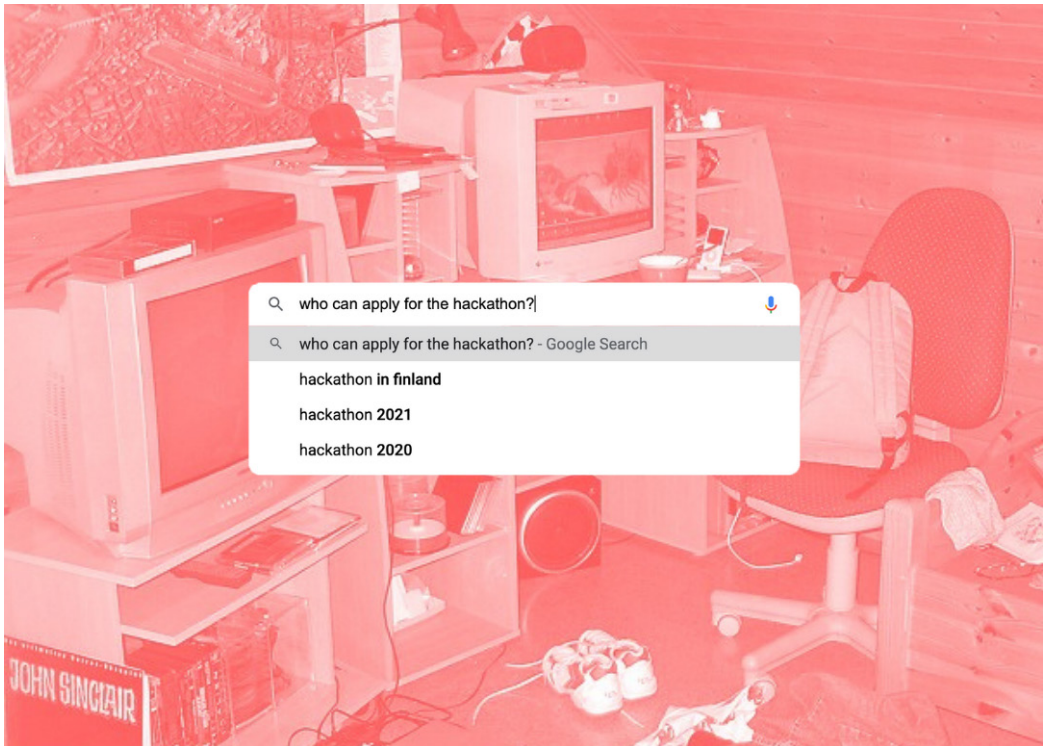


Figure 4.8: 'Who can apply for the hackathon?', by Helmi Korhonen for Feminist Futures Helsinki (2021). This illustration was originally used in the FFH social media before the participant applications opened.

One of the elements that we wanted to prioritise in the hackathon was diversity in participation. We approached diversity from an intersectional perspective, and as such, we looked for participants who would represent a wide range of identities including, but not limited to, diversity in professional/educational background, gender identity, migration status, nationality, ethnicity, disability status, age, and experience. First and foremost, we wanted to reach beyond the demographic that would usually participate in a hackathon. To us, this meant reaching beyond university students and technology experts. It also meant using a language that would speak to the audience that we wanted to reach. In practice, this meant communicating clearly on our website and social media that "this is not an exclusive space for programmers and hackers" — but also that "it is not an exclusive space for women". We clearly stated how we defined feminism, as we also have in this thesis, stating that "when we say "Feminist Futures" we are talking about anti-racist, decolonial, accessible, equitable, and just futures for people of all genders and all backgrounds. Our definition of feminism begins with the belief in and the advocacy of the political, social and economic equality of all people" (Feminist Futures Helsinki, n.d.).

While we knew that using "feminist" in the title would turn some people away, we also felt strongly that it (1) would set a clear tone for the kind of space we wanted to create, thereby limiting the risk of attracting people who would not be respectful towards the other participants, and (2) would be an opportunity to widen the public's perspective on the kind of issues that feminism can be applied to (Toupin, 2014).

Having these goals regarding diverse participation helped us in our outreach process, as we could then actively seek out other communities that we could share the event with. However, despite our best intentions, we were also limited by our own position as an organising team mainly consisting of immigrants who had only lived in Finland for one to four years. This fact meant that we did not have as extensive a network as we may otherwise have had, and it meant that we started from what we knew:

Aalto and other universities across Finland. From there, we also started using social media (Instagram, LinkedIn, and later Facebook), which proved to be a vital tool for spreading the word about the application around in a more organic way. Here, people could spread the word with friends and in relevant groups, and soon we had reached over 8000 people on Facebook. In addition, we also reached out to organisations, publications, and community groups who helped us by spreading the word with their networks.

Apart from standard entry fields for contact details, we added questions to the application form that we hoped would help us understand the motivations and backgrounds of the applicants, such as:

- Name up to three skills and/or experiences that you bring to the hackathon that could benefit others. These can be personal, professional, a hobby, or something else.
- What is(are) your native language(s)?
- If you are comfortable, please share your gender. We are asking for this information to aim for equity in group formation to create a safe and comfortable space for everyone. You can enter N/A if you would like not to share this information.
- If you are comfortable, please share whether you have any disabilities (...).
- Is there anything else about your identity and experiences that you'd like to share with us?*

** The organisers of Our Feminist Futures at MIT were kind enough to share their application form with us, so our form is inspired by the one they created.*

In the end, we received 90 applications but had agreed only to take 50 participants, so the selection process began.

Due to our team's limited time frame and human resources, we approached the selection process with a set of soft criteria. The selection of the participants was made by the two co-authors and one other member of the organising team. The criteria can roughly be put in the following categories:

- **Motivation**: Does the person seem to be motivated to work on this topic? What is their motivation? How much effort does it seem like they have put in writing the application?
- **Expectations**: Do their expectations match what we aim to do in FFH? Can we do something to better live up to their expectations?
- **Experience**: How much experience does the person have with the topics explored in the hackathon? What kind of other experience does the person have? E.g. professional or educational background, volunteering, activism, and other life experiences.
- **Feminism**: Do they seem to be living according to feminist values/to understand the concept of intersectional feminism? (This criterion was not to exclude people who were new to feminism, but rather to protect the safety and well-being of individuals who may otherwise suffer from such people taking part).
- **Time commitment**: How much time does the person have to commit to the hackathon? (While we did open it up to people who would only have 5-10 hours per week, we did not want to risk having too many participants with only 5 hours per week. Therefore, we strive to prioritise balancing people with more or less time to commit).
- **Gender identity**: Since we had an overwhelming majority of applicants who identified as female, having more equitable participation of genders, in this case, meant favouring the participation of male, non-binary, and gender-fluid participants.

It should be noted that none of these criteria alone secured anyone a spot in the hackathon.

As we did not want anyone to feel like they were not good enough to participate, especially since we had asked such private questions in the application form, we brainstormed how we might still somehow engage the people we could not pick in the end. We realised that some applicants might contribute uniquely, even if they were not the best fit for the projects. Had we had access to more resources, we may have been able to find more ways to engage them. In the end, this was one of the reasons for the public series of talks and a workshop. In the case of one applicant, we invited them to speak in our public series.

As mentioned in Principle no. 4 one of the considerations when forming the teams was the applicants' availability and prefered working times. In addition to this, we approached the team formation process a bit like party planners: Who would enjoy spending time with whom? Who would have interests and backgrounds that complement each other? Of course, this is an approach with many uncertainties involved. For one, there is no way we could understand exactly how a group of people would work together, based on a single form. However, while it did not work perfectly in every team, many teams did express appreciation for the diversity in their team.

> "I think for me it was amazing and very empowering to see so many people sharing ideas and working for a better future. That alone was such a blessing. And also I think meeting people from outside my field, different countries, different backgrounds, it's super cool. And I think now with [university] you already have this quite international group, but after [university] it will probably be much more difficult to connect with so many people at the same time. So I think it would be cool to do more of these kinds of hackathons. So diversity was probably the main cool thing" (FFH participant, interview, June 8, 2021).

> "I approached the hackathon as an experiment. I wanted to get 'on the field' experience of the Finnish collaboration style. I loved the silence, the pause, the void space offered so participants could gather their thoughts during a conversation. I wish it were a standard in other part of the world" (FFH participant, written feedback, June 16, 2021)

Principle no. 6: The hackathon should follow a curated journey of four steps accompanied by four toolkits

Through conversation with Nuria Solsana, Adjunct Professor of Service Design at Aalto University, we decided it would be helpful for the participants if we curated the hackathon process in multiple, clearly defined steps. In addition, as many participants may not be accustomed to how a design process works, we believe this was an excellent chance to introduce some tools and resources that they could use.

We were fortunate to have many people engaged in the planning process, other than the members of our organising team. Apart from Nuria Solsana, some of the people who helped us shape the hackathon journey included Giovanna Esposito Yussif (curator, researcher, and artistic director at Museum of Impossible Forms); visual communication designer Roby Redgrave McPherson; and service designer Eevi Saarikoski (both from the Helsinki-based feminist design collective Effort). Through conversation with Giovanna, we developed our language and actions to more clearly reflect our intentions. Roby and Eevi helped us curate the toolkits and thereby also the experience for the Journey.

As detailed below, we curated the four steps of the hackathon to guide the participants through a reflexive process of discovery. We wanted to make sure that we challenged the teams in their thinking but also that the teams would feel enough agency to challenge the briefs they had been given.

The toolkits that accompanied each step consisted of several prompting questions and resources in the form of readings, videos, websites, and a typeface archive. This was because we know that different people learn in different ways, and we wanted to make sure that there was a balance between academic papers, creative projects, and personal stories. For the toolkits, we made it clear that they should indeed be considered as such; we did not require them to look at all the resources but offered them as elements in a toolbox that they could pick up if they seemed relevant. A short description complemented each resource to make it easier and faster for the participants to see what might be relevant or inspiring.

A more detailed account of the contents of the toolkits can be found in section 4.3.1.

The toolkits appeared to be very successful in helping the teams manage their own time and still retain agency. For example, reflections from three different teams went like this:

"[The toolkits] were really helpful to remind ourselves 'okay, what do we actually have to do?'. I also liked the first package we received where there was already a lot of information about where to educate yourself. So they were super helpful" (FFH participant, interview, June 7, 2021).

"The toolkits were very good and very helpful. Whenever we had a meeting we used to open the toolkit, and it was great for us. It's very natural when you have different people with different thought processes to get distracted. But when we had the toolkit, even though there were times when there were debates in the team, we knew that we had to be in alignment with the topic. And then we would all come together and process it that way" (FFH participant, interview, June 7, 2021).

"I really liked the communication mentoring that was happening before the end of the hackathon. So maybe these toolkits could somehow be connected with the mentoring sessions. So that they would follow those toolkits or refer to them" (FFH participant, interview, June 7, 2021).

Principle no. 7: There should be a public programme of talks and workshops
It was essential for us to have a public element to the hackathon for two main reasons: (1) We wanted to have something that was open for everybody, including the applicants that we had to reject, and which was not restricted to only participants, and (2) we wanted to be able to combine teamwork with input from practitioners in the field in order to enrich the project work.

As previously mentioned, it was imperative to us to subject the participants to many different voices and perspectives on what can be considered a feminist issue. For this reason, we encouraged the participants to participate in as many sessions as they could during the #StopHatredNow Festival, which took place during the first week of the hackathon. The festival featured many important talks and panel discussions around racism, ableism, and environmental justice, among others.

In the end, we had a public programme featuring:
- 1 Workshop
- 5 Talks
- 1 Showcase

These events will be explained in further detail in section 4.3.4.

"The public programme made it click for me in our project. Things like that are good, and you also know that there are people working on these outside [of the hackathon]" (FFH participant, interview, June 7, 2021).

Principle no. 8: Everything we do should be done in accordance with *Data Feminism* principle no. 7: Make labour visible

There are multiple reasons why this is one of the principles of *Data Feminism* (D'Ignazio & Klein, 2020), but essentially it comes down to what is valued. You make the labour's value visible by giving credit to the many hands it takes to create something. It is the antithesis to the hero journey of the lone creator that we know from many tech companies; the story of a young man working away on his computer in his garage, eventually establishing a multi-million dollar company. That is just not the reality. Every success story has many enablers (human and non-human), and it is time to acknowledge them. That, in and of itself, is a feminist act.

We, the co-authors of this thesis, obviously did not work in isolation. Therefore, it was essential for us from start to finish to give credit where credit was due, and we hope this thesis also shows how many people contributed to the creation of this event.

From the get-go, our work was deeply and undeniably inspired by the team's work at MIT. Two of the researchers, Alexis Hope and Catherine D'Ignazio, were kind enough to give us advice and have several calls with us in the weeks leading up and after the hackathon. So naturally, we wanted to make sure that what we did was respectful of their efforts and did not conflict with their values. The work they have been doing, and continue to do, concerning feminist hackathon research is foundational to everything we have done at FFH. We made this clear on our website, and we shared the origin story as often as we could in meetings with partners and sessions with the participants. During the organising process, we were enabled by many helpers along the way. From the people in our team with whom we could coordinate and share tasks to all the people who agreed to have calls with us who eventually became partners, helped us develop the hackathon concept or gave us references for people we could get in touch with.

Principle no. 9: There should be joint sessions to encourage collaboration and cross-pollination across teams

Another priority in the hackathon was to design interaction spaces and events among participants that would reflect the idea that, in order to tackle systemic societal issues, coordinated and collective action is more desired than only isolated and individual actions. Therefore, it was important for the organising team to foster an environment of collaborative learning rather than competition among teams and participants. This resulted in a programme in which most mentoring sessions were done together with different teams. In these sessions, teams had the chance to listen and give comments to each other and exchange ideas and motivations. In addition, teams could also listen to the mentors' feedback to their own and the other teams, both from the same and different tracks.

The elements of these sessions were:

- 2-4 teams per session.
- 30 minutes per team, combining presentation, discussion, and comments.
- 1-2 mentors per session. The type of mentor depended on the type of session. For example, there were track partners for the track mentoring, communication mentors for the communication session, and mentors with experience in varied disciplines for Sharing Saturday. These larger joint sessions will be described in further detail in section 4.3.5.
- 1-2 FFH organisers per session.

Principle no. 10: No winners will be named
Not naming a winner of the FHH hackathon was a conscious design decision for several reasons.

In traditional hackathons, the winner is often picked based on how the judges evaluate the final pitch and prototype. However, there is little attention paid to other variables, such as the ability to imagine collectively, have thought-provoking conversations within the team, or build relationships that will lead to potential collaboration in the future. Because structural issues require many interventions, we see these as characteristics that enable long-term and sustained engagement with societal issues. We believe these characteristics to be more critical for tackling the issues presented in the hackathon than any outcome that could be presented in a final show after only 2.5 weeks. We communicated this expectation throughout the hackathon: we were not expecting any final result by the end of the hackathon; we encouraged teams to share what they had worked on and talked about in the way and format they preferred.

Because we acknowledge that many different kinds of contributions are equally valuable in this systemic framework, we communicated this level of expectation throughout the hackathon. The steps in the participant journey, the materials, mentoring sessions, and communication were all designed to communicate that the FFH hackathon valued different skills and perspectives equally. We avoided encouraging one-size-fits-all solutions and invited teams to spend more time understanding the context and challenging power structures causing such issues.

We could not imagine awarding only one winner. Because the teams' projects came from structural issues, there is no single solution to solve them. Instead, many approaches for different parts of the system are needed. In addition to this, unlike a traditional hackathon, no two teams were working on the same project brief. As a result, it would be like comparing apples with bananas — or in some cases, with pencils.
In the MIT hackathon, the organisers gave different superlatives to each team. In our case, we decided to give a small gift to every participant after the hackathon. Additionally, we offered to provide limited funding to any projects that wished to continue their collaboration. However, no teams requested that. This failure of continuation is something we will reflect further on later in the thesis.

Principle no. 11: We should create a safe and inspiring environment
As mentioned in Principle no. 6, we wanted to attract and reach participants beyond academia and tech. We also specifically wanted to make sure that FFH felt like a safe space for people whose identities are marginalised by society to show up and take part. This does not happen automatically, and we took steps to implement a language and a framework that supported this ambition.

First of all, we stayed flexible and reflective around our use of language throughout the whole process. We tried to be aware of words and terms that might be triggering to some people and made an effort to explain where we were coming from when using certain terms.

**Querq ry is a queer-friendly volunteer-run event venue & workspace in Vallila, Helsinki*

We also worked with a member of Querq ry* to write a set of safer space principles. Like many others before us, we use the term safer rather than safe to acknowledge that safety is relative, and situations in which one person feels safe may not feel safe to another person. This relativity was part of the core of the principles we set. We established the principles by having a two-hour call with the aforementioned member from Querq ry and then developed them further with our organising team. On the hackathon Kick-Off day, we also shared them with the participants and asked them to comment on them so we could re-adapt them if needed.

Safer space principles were created to ensure the alignment between the vision created by our team and the atmosphere of the hackathon in practice. Creating the safer space principles was not an instant guarantee that they would be adhered to during the hackathon events. However, it was a decent start to guide participants, partners, and team members alike to navigate the experience in a way that maximised collaboration and joy and minimised discomfort and disrespect. The principles were inspired by the guidelines set for Querq ry, Our Feminist Futures, #StopHatredNow festival, and Museum of Impossible Forms. In the principles, which we titled Community Guidelines, we wrote: "We are a community with many different backgrounds, and we all have different experiences of spaces in which we learn and interact. We want to collectively set the tone for the kind of environment we are creating together. This is a living document that will be revised based on feedback from the community. The guidelines are made for, and concern the participants and organisers equally. We hope that the participants will help us revise the guidelines, so that they do not only represent the organisers, but everyone who is present in the event."

The guidelines were as follows and can be read in full on feministfutureshelsinki.org.

1. Respect: Each person matters. Everyone is welcome to contribute.
2. Sustain: Self-care. Zoom fatigue.
3. Dare to share: Speak your truth. Listen with intention.
4. Feeling safe: No bullies. No violence.
5. Lean in: Accountability & Learning.
6. Inclusion: Contradictory Coexisting Realities
7. Collaboration over Competition: Our way of working

When reflecting on these principles and their function in the hackathon, one participant shared the following:

"The rules have to come from the values. If people don't understand what the values are, then the rules will not stick. It's just going to be like school. So in that sense, it might be that this time limit was a big restraint on making sure why those values were there. Ideally we would have this vision building session where we come together to look at 'what is the work we're doing and why we're doing it', and 'what even are feminist futures as a concept'. Why is there a need for this work? Starting from the theoretical ground, with discussions and debates. And then we would have this hackathon as the practical side of things. So in that sense, maybe missing those shared values was why the way we collaborated was different from each other" (FFH participant, interview, June 7, 2021).

Building on the idea of the visioning session, we add that facilitators should ask about people's experiences rather than their opinions so that when you set a policy, or in this case safer space principles, it comes out of people's sincerest experiences. The assumption would be that people will respect the policy more — but it needs to be a participatory process (Brown, 2021).

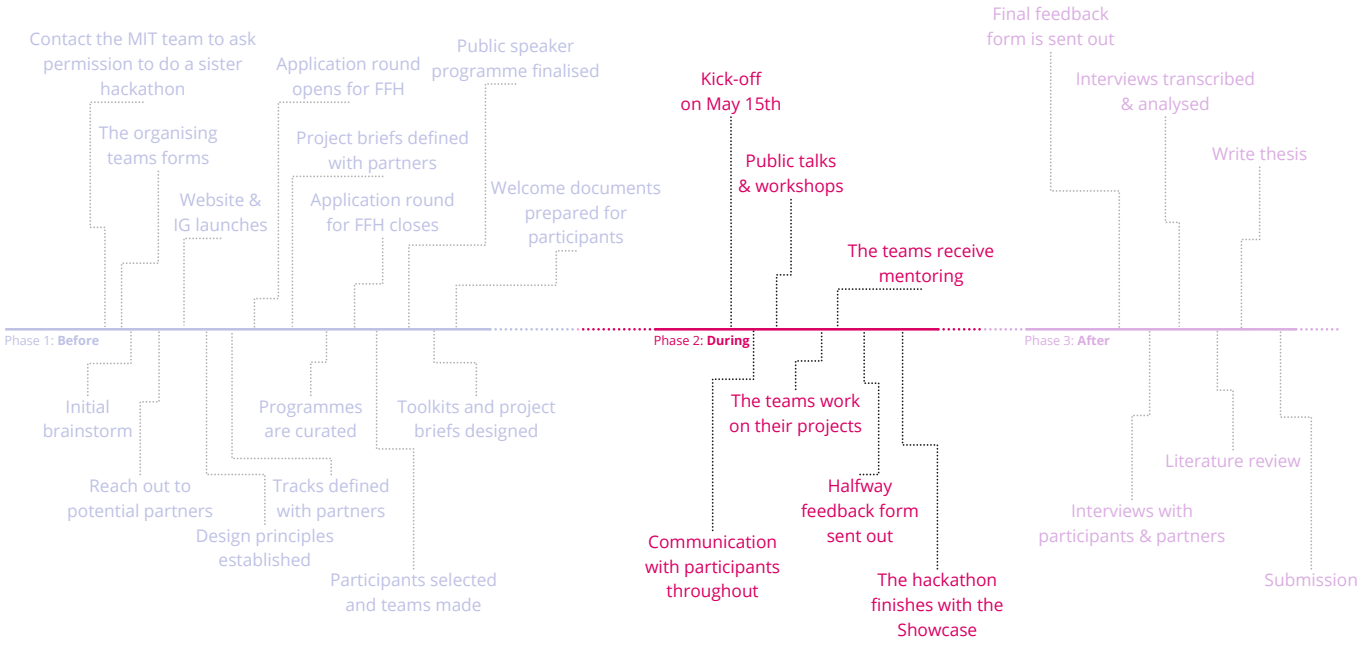


Figure 4.9: Feminist Futures Helsinki hackathon 2021 timeline. Phase 2: *'During'*.

4.3 Phase 2: During (Facilitating): Watching It Come To Life

This section will describe some of the main activities and elements of the 2.5 weeks of the hackathon. We will introduce the toolkits we provided, the feedback form we sent halfway, the public programme, and the three main cross-pollination events we hosted.

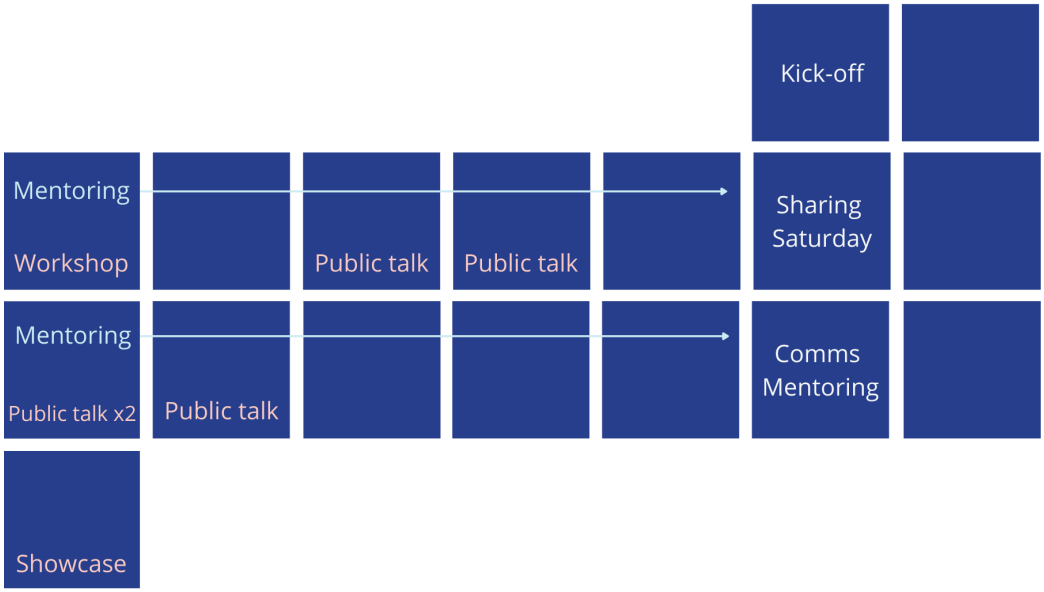


Figure 4.10: The Feminist Futures Helsinki hackathon calendar. The calendar shows the rough programme from Saturday May 15 to Monday May 31, 2021.

4.3.1 The Toolkits

We sent every toolkit at the beginning of each of the four steps in the participant journey, so the teams could get guidelines to move forward and put their journey into perspective with the vision and expectations set by the FFH team.

The names and dates of these phases were: (1) Explore the Context: May 15, (2) Reframe the Project Brief: May 19, (3) Imagine Feminist Futures: May 24, (4) Communicate and share: May 27.

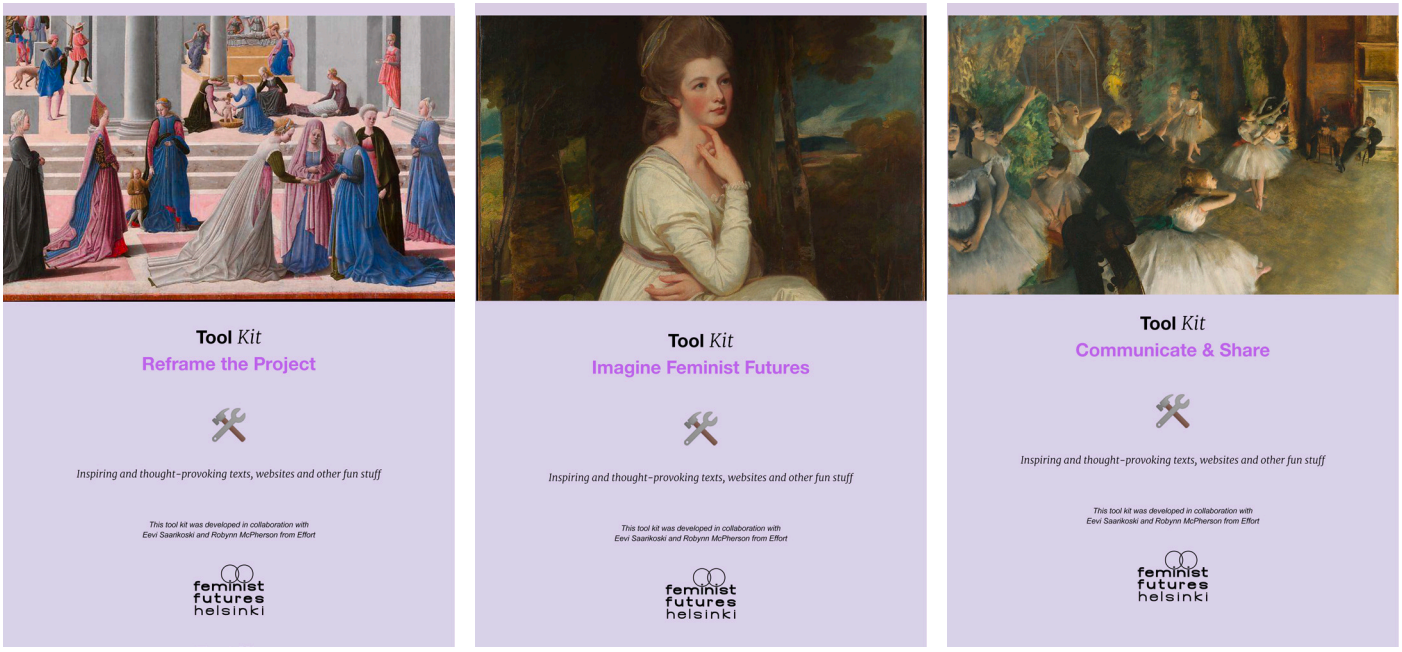


Figure 4.11: Covers of three toolkits 'Reframe the Project', 'Imagine Feminist Futures', and 'Communicate & Share'. The toolkits are open access and can be found at feministfutureshelsinki.org

The four steps of the journey went as follows:

1. Explore the context
The first document the teams received was more of a brief than a toolkit. The brief was co-written with the partners. It consisted of background information on the organisation and the topic, the questions they were asked to explore, and resources for further learning. The briefs were written in the track format, so each team received the full brief for their track, and as such, they would be able to benefit from the background and resources of other teams as well, in cases where that seemed relevant.

2. Reframe the project
The toolkit for this step asked the participants to consider:

- What they were going to use from the initial brief
- What they would like to change
- What they would like to add
- What had particularly sparked their interest

The idea was that the teams should critically review the brief and hopefully develop a sense of agency around the project they were about to do.

In addition to this, it also included (amongst other resources):

- A Norm-Criticism Toolkit by ILGYO (The International Lesbian, Gay, Bisexual, Transgender, Queer and Intersex Youth & Student Organisation)
- The link to the open sources access for *Data Feminism* by Catherine D'Ignazio and Lauren F. Klein
- A collection of essays and a Nordic intersectionality glossary titled Actualise Utopia published by Kulturrådet
- A link to the Design Justice Network

3. Imagine feminist futures
The third toolkit was introduced at the beginning of the second week. After the initial research and having had at least one mentoring session, the task was to look to the future — to imagine what might happen one year, five years or even ten years from now. The teams were told they could set the timeframe and the framework. It was

made clear that we did not expect them to have it all figured out after just one week. Instead, we encouraged them to spend some time imagining how things might be different if intersectional feminist values were intentionally implemented in their project area.

We asked them to reflect on the following questions when imagining feminist futures for the projects:

- Who is prioritised in these futures? Who is not prioritised/left behind?
- Who will financially benefit from these futures? Who will pay a higher price?
- Who has the power now? Who will have the power in the future?
- Who are you as a team (reflect on your situatedness)? How might that limit your visions for the future?
- Whose knowledge are you building on? (your partners, mentors, readings, interviews, personal experience, etc.) How does this influence your project?

For this toolkit, some of the included resources were:

- A glossary on coloniality in design published by Effort titled "Where Are We: Grasping Coloniality and Design"
- A reference to read about The Matrix of Domination and the Four Domains of Power as coined by American sociologist Patrica Hill Collins
- A feminist classic: The 1988 essay "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" by Donna Haraway
- Panel discussions and talks about Black feminism and culture in the Nordics, discrimination in technology, design justice, afro-futurism and pleasure activism

4. Communicate & share

For the final toolkit, we wanted to challenge and encourage the traditional ways of presenting knowledge. While this ambition was naturally limited by the online format that we were bound to, it was still important to us that we made it clear to the participants that they were free to explore other presentation styles than a classic PowerPoint and an A-Z storyline. This decision was a feminist effort to acknowledge and recognise many forms of knowing and of sharing knowledge. We also made it clear that we did not expect polished presentations, extensive campaign plans or detailed 5-year plans. Instead, we told them: "We just want you to show up as you are with what you have. Remember that there are many ways of knowing and many ways to tell a story. We encourage you to embrace the plurality within your team and also remember that this should be a fun experience for you."

We prompted the participants with the following questions:

- What is the story that you want to tell? What are the futures that you want to see happen?
- Who is visible in your work and your presentation?
- What norms and stereotypes are you reproducing — or challenging?
- Who is this presentation accessible to? Is there any way you can make it more accessible?
- Who is your audience? Who will see/hear the visual communication of your idea, and where will it end up? On Instagram? In portfolios? Sent to governments, clients, companies etc.?

In addition to these questions, the toolkit included:

- An archive of typefaces made by women
- A guide to Pecha Kucha presentations
- A guide on how to make zines
- An environmental campaign ad with American activist and drag artist Pattie Gonia
- A presentation from our public programme with Indian artist Shubhangi Singh
- The recording of the resiting of The Hill We Climb by Amanda Gorman
- A talk given by American scholar, designer and activist Sasha Costanza-Chock given at Eyebeam's From the Rupture

In addition to this toolkit, we also organised a talk with typeface designer and art director Samar Zureik about her process of designing a bilingual typeface. We will discuss this more later in the thesis. We also had a shared mentoring session specifically dedicated to the communication of the projects.

The toolkits were later made open source and can be accessed publicly on the FFH website.

4.3.2 Halfway Feedback Form

At the halfway mark of the hackathon, we sent out a feedback form. In the following section, we will walk through some of the significant insights we gained from this. Unfortunately, the feedback form was only filled out by 13 out of the nearly 50 participants, so it cannot be considered representative for the whole cohort of participants.

Highlights

When asked what the highlight(s) had been thus far, participant respondents expressed great joy in the interpersonal experiences: meeting and getting to know their teammates, listening to other teams, and getting input in the mentoring sessions. The respondents also expressed that the talks in the public programme had been very inspiring.

On safety of the environment

Although most of the feedback we got, both through the form and from interactions with the participants, was positive, we received a few messages about struggles within the teams. For example, some people said their team dynamic was challenging to navigate, and others expressed that they did not feel safe in their team. This made us realise that even though we had created and shared the safer space principles, we had not done a good enough job ensuring that everyone understood and adhered to them. In other words, we had made assumptions, which for the most part held up, but the few breaches that were there made for some very uncomfortable situations for some participants.

The intensity of the programme

Some respondents expressed being overwhelmed with the density of the programme and with rightsizing their response to the brief within the given timeframe. One participant wrote:

"[I am struggling with] understanding an appropriate scope for our contribution. Should our scope be very small so we can make measurable progress within the time bounds of the hackathon, or should we allow for a larger scope of vision but accept that as a group we can only help complete, say, part a of step 1?" (FFH participant, written feedback, May 25, 2021)

Community feeling among participants
Several participants also expressed that they would like there to be even more opportunities for informal socialising. One respondent wrote:

"Maybe [a] great thing would be also to add examples for social mixer like if someone wishes company for lunch it would feel little bit strange to ask about that in some channel* etc. Maybe I just feel that there are many interesting people and some chatting also about other themes than the track would be nice. Let's hope next time there is no covid-19! Picnic would be great." (FFH participant, written feedback, May 25, 2021)

** "Channel" refers to the different forums we used on the communication and collaboration platform Slack. "Social mixer" was one of the channels we had created, where participants and organisers could introduce themselves to the rest of the cohort.*

4.3.3 Meditation and Movement

There were five meditation and movement sessions as part of the activities offered to partners, partners, and team members. These sessions were led by Maeve Korpela and were meant to encourage people in the hackathon to balance remote working with exercise and relaxation. The sessions ran in the mornings and evenings, and they required no previous experience for attendees.

Figure 4.12: 'Mediation & Movement' for Feminist Futures Helsinki.

4.3.4 Public Programme

We wanted to have a public programme for two main reasons: (1) To expose the participants to as many diverse perspectives as possible, and (2) to be able to offer something to all the people that we were not able to take in as participants or who did not have the time/capacity to apply as a participant. Furthermore, the choice to have the public programme is connected to the feminist HCI quality of "advocacy" —

"the idea that feminist design begins from unequal conditions of power and privilege and should strive to bring about political emancipation" (D'Ignazio et al., 2020, p. 17). The choice was also inspired by our sister hackathon, Our Feminist Futures, which organised a public talk once a week during their month-long hackathon. In a paper outlining some of their insights from previous hackathons, D'Ignazio et al. explain: "Rather than centering the vision of the designer, or, in our case, the organisers of the hackathon, we chose to create opportunities at our event where participants would build their structural literacy. That they did this is reflected in our findings in which participants articulated how the event helped them make the connection between poor breast pumps and paid leave policy. This is consistent with one of the central goals of feminist consciousness-raising: to build individuals' awareness of how structural forces of oppression operate as well as to build coalitions towards structural solutions" (ibid).

The public programme consisted of the following events:

Figure 4.13: The five public talks and one public workshop held during the FFH hackathon.

17.05.21: Collective Imagining for Feminist Futures (workshop)
This workshop served as a mini 3-hour version of the hackathon. Two members of the organising team facilitated the workshop, product designer and researcher Uttishta Varanasi and PhD candidate in Critical AI Karolina Drobotowicz. They followed the Futures Frequency workshop method developed by Sitra. In preparation for the workshop, we had several meetings with Jenna Lahdemaki-Pekkinen from Sitra, who helped us prepare.

We offered 20 spots to the workshop, as that was what was recommended to us by Sitra. There was great interest, and 36 people signed up for the waitlist, making it a

total of 56 registrations. Unfortunately, some of the accepted workshop participants did not show up, and in the end, we only had 10 participants in the workshop.

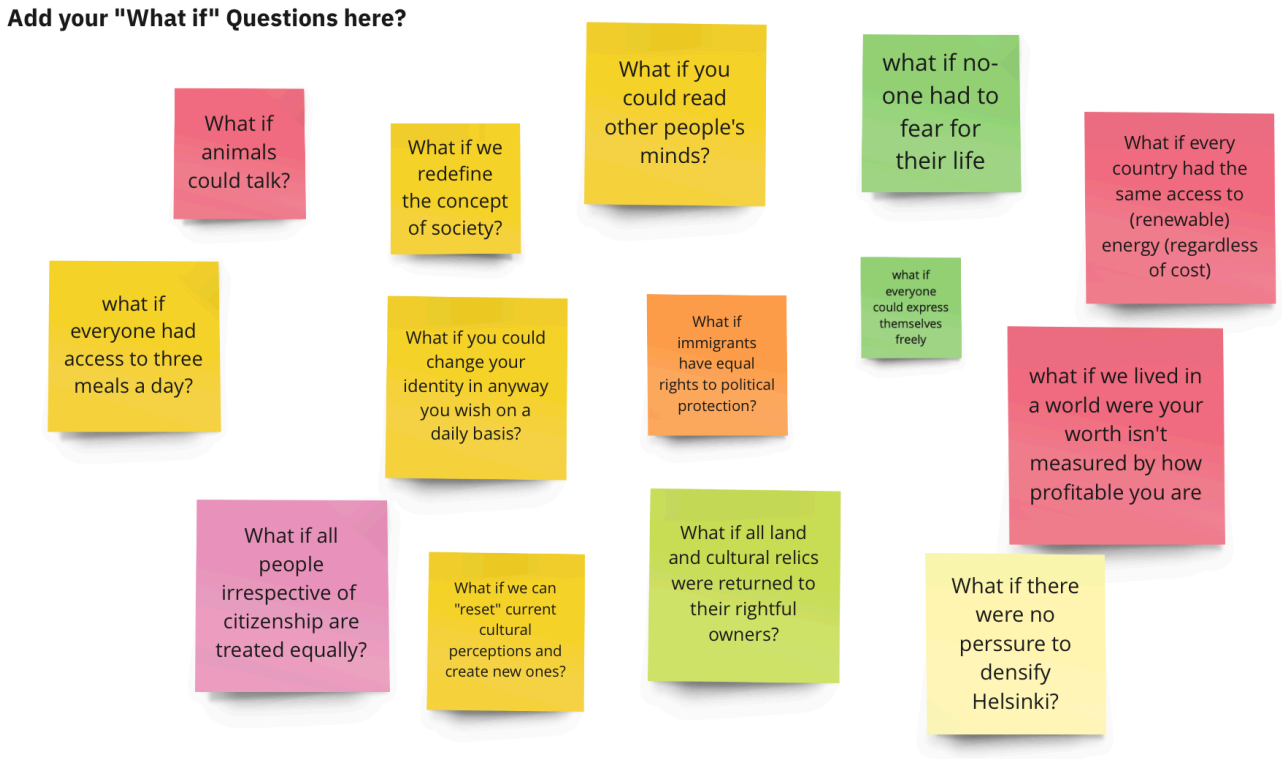


Figure 4.14: Notes from participants during the Collective Imagining for Feminist Futures workshop. The figure shows "what if" questions to serve as prompts to start imagining futures.

19.05.21: Decentralisation as a Practice for Liberation and Resilience with Synes Elischka (talk)

In this talk, Synes Elischka talked about their own experience of co-creating a decentralised organisation structure for Querq/Nurja in Helsinki and gave some tips for how to start experimenting with how we organise ourselves. The talk was facilitated by Henriette Friis.

Ahead of the talk, Synes shared the following prompt: "Take a moment to think about all the different organisations that you participate in: how many of them are built around "coercive power," using punishment or reward to make us act to meet the needs of the system? Decentralisation is about finding an organisation structure that constantly evolves, and adapts to our needs and values… So instead of humans adjusting themselves to the needs of the system, we keep updating our systems so they meet our needs."

Figure 4.15: Screenshot from the talk 'Decentralisation as a Practice for Liberation and Resilience' with Synes Elischka (2021). The full talk can be found at feministfutureshelsinki.org

Offering a session on decentralisation appeared to us to be a good way to offer our participants more input on governance structures they can follow when they participate in collective forms of action-taking. Therefore, this talk by Synes was chosen as a provocation for people to review the structures they live and work within and realise that they have the agency to do things differently.

20.05.21: Making Space / Taking Space with With Shubhangi Singh and Brenda Vértiz Márquez (talk)

This talk consisted of a short presentation from each speaker, visual artist and filmmaker Shubhangi Singh and designer and researcher from Aalto University Brenda Vértiz Márquez, followed by a conversation between the two.

Figure 4.16: Screenshot from the talk 'Making Space / Taking Space'. In the image, Shubhangi Singh explores concepts of (in)visibility in different urban contexts. The full talk can be found at feministfutureshelsinki.org

The speakers talked about making space for play and participation in our cities and communities. It also covered the act of countering invisibility with presence and making yourself seen, for example, through women's act of loitering in public spaces in India. The speakers also reflected on the future of public spaces and what it means when only certain demographics get to decide how they are used. The talk was facilitated by the co-authors.

Figure 4.17: Screenshot from the talk 'Making Space / Taking Space'. In the image, Brenda Vértiz Márquez presents the "Peatoniños", a project combining activism and urban design to accommodate public spaces for children. The full talk can be found at feministfutureshelsinki.org

We learned about Shubhangi Singh's work through her presentation at Laser Talks a couple of weeks before the hackathon, and we were instantly captivated by her use of poetry and art as a way to communicate and draw in her audience with emotion and strength. We already knew that Brenda Vértiz Márquez had conducted research

in Mexico City on topics regarding spatial justice, city planning, activism, and architecture. She brought a lot of energy and gave concrete examples of issues and initiatives. Having these two women speak together offered the audience two very different approaches that originated from the same set of values. Both speakers spoke from a place of agency that we wanted to share with the audience.

24.05.21: Bridging Two Worlds: Exploring Bilingual Typefaces with Samar Zureik (talk)
This talk explored the impact and potential of bilingual typefaces in the public sector and, in particular, in the Finnish immigration system. "Tirhal Family: A bilingual typeface bridging two worlds" is the thesis work of graphic designer and illustrator Samar Zureik. The talk was facilitated by the co-authors.

Figure 4.18: Screenshot from the talk 'Bridging Two Worlds: Exploring Bilingual Typefaces'. In the image, Samar Zureik compares different typefaces. The full talk can be found at feministfutureshelsinki.org

We learned about Samar's work through our conversations with Eevi Saarikoski and Roby Redgrave McPherson from Effort. We were intrigued by the nature of the work and how it was such a tangible example of approaching systemic issues (in this case, poor communication in the immigration system), from where you are and with what you have (in this case, understanding and experience with graphic design and typography). Samar offered an intriguing insight into her process in creating a new typeface. With that, she showed a great example of the importance of detail and culture-specific design. Samar's work could be one example of the kind of cultural translation discussed in chapter 3.3.

24.05.21: Indigenous Perspectives on Eco-Justice with Petra Laiti (talk)
The co-authors facilitated this talk and discussion with Sámi activist and writer Petra Laiti (Mihku Ilmára Mika Petra).

In this engaging and powerful talk, Petra Laiti discussed the importance of including Indigenous perspectives when discussing eco-justice.

Ahead of the talk, she wrote: "Indigenous people have been marginalised by colonialism for centuries. In the era of the climate crisis, the general public has become increasingly aware that indigenous people play a key role in upholding eco-systems in their traditional lands. Still, the climate movement is not exempt from marginalising indigenous voices. How can indigenous people be brought to the forefront of the climate debate? How can we recognise when we are trying to do good, but end up doing harm instead?"

This talk by Petra Laiti was material to the FFH hackathon for two main reasons. First, ending the Sámi communities' oppression and acknowledging and compensating them for their valuable knowledge of land management should be at the heart of eco-justice in Finland. Second, two of the projects in the hackathon had been set by two Sámi collectives and were specifically focusing on issues around Sámi allyship and action towards the climate crisis.

"The one about the Sámi allyship, it was super interesting. I feel I learned a lot. I think I learned more in those 45 minutes than I have in my 27 years as a Finn. It was very eye opening, and I think that has already made quite an impact in my thinking" (FFH participant, interview, June 7, 2021).

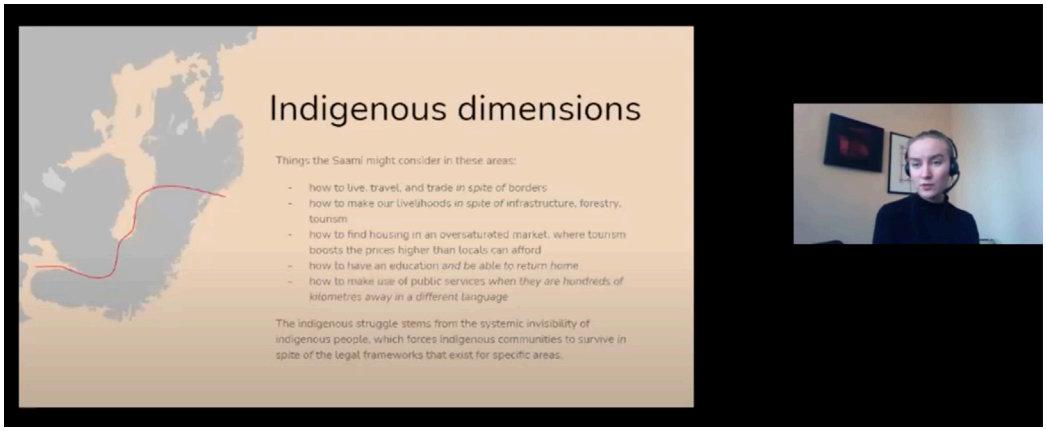


Figure 4.19: Screenshot from the talk 'Indigenous Perspectives on Eco-Justice'. In the image, Petra Laiti centers Sápmi in a map of Northern Europe. The full talk can be found at feministfutureshelsinki.org

25.05.21: Preparing for a Culture Shift In Data Design with Context with Gülşen Güler and Anjali Mehta

The co-authors facilitated this talk and discussion with Gülşen Güler (Director for Research and Learning at Civic Software Foundation) and Anjali Mehta (Chief of Staff at Civic Software Foundation).

Civic Software Foundation is a US-based nonprofit with a global network of contributors and volunteers. They create technology and support applied practices that reinforce equity and democratic values.

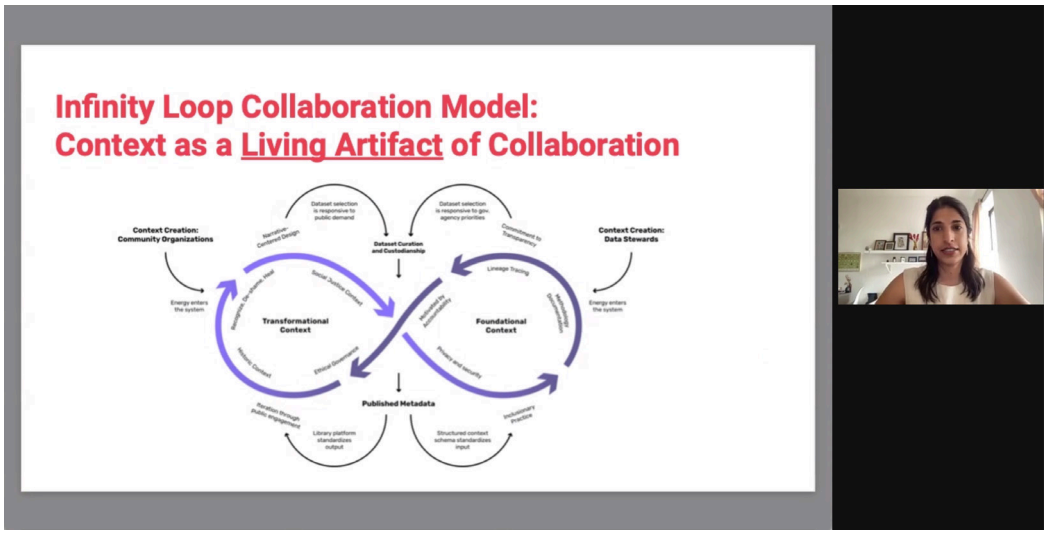


Figure 4.20: Screenshot from the talk 'Preparing for a Culture Shift In Data Design with Context'. In the image, Anjali Mehta presents the Infinity Loop Collaboration Model. The full talk can be found at feministfutureshelsinki.org

In this talk, Gülşen and Anjali spoke about the increasing attention and power given to data and how this has created the assumption that data itself is conducive to

social justice imperatives like equity and accountability. What we witness now, as a result, is a data-deterministic imaginary where data becomes synonymous with truth and a general acceptance that data is a power unto itself. Their session highlighted the pernicious side effects of this devastating loss of distance between data, truth, and power that needs attention and remediation to counteract the exploitative relationships that prevalent platform structures make practically inevitable. They suggested Structured Context as a practical application to capture and disseminate data lineage, provenance, and the historical and social contexts of a given dataset as a way to encounter data-determinism.

31.05.21: Feminist Futures Helsinki Hackathon Showcase
The last day of the hackathon was spent on the Showcase, an event that lasted four hours (from 15:00 to 19:00). In the event, participants showcased the outcome of the projects that emerged from the previous 2.5 weeks of learning, exploring, and creating. A total of 12 projects were presented, and the Showcase was hosted by the two co-authors as well as Helmi Korhonen, Nitin Sawhney, and Eve Nieminen from the organising team. In addition to the 104 individuals who registered for the audience, we had also invited 78 participants and partners.

The schedule for the Showcase was based on the four tracks, consisting of three 10-minute presentations, followed by a breakout room for each team where partners, other participants and the general audience could ask questions and offer feedback. Between each round of presentations, there was a short break. As a result, the Showcase had a fluctuating attendance as audience members came and went. It peaked at 65 people on the Zoom call.

The decision to make the Showcase public was based on our belief that the partner organisations and the projects that had come out of the hackathon represented such important work that we thought as many people as possible (especially and ideally people in power) should be able to see it. These people in power included, for example, people who are in positions to create academic curricula, people who are in positions to invest in technological development, and people who are part of the local governing bodies. In addition, we were hoping some connections between the audience, participants, and partners could be made.

Figure 4.21: Final slide of the FFH Showcase, on May 31, 2021.

4.3.5 Kick-off, Sharing Saturday, Communications Mentoring

We had three joint sessions in which all the hackathon participants were invited to join. They took place on the three Saturdays during the hackathon.

First Saturday: the Kick-off. On May 15, the FFH team and participants met online for the first time. In the session, the FFH team presented the hackathon, introduced the project ideas by showing pre-recorded videos from the track partners, and disclosed the teams within each track. Then, the FFH facilitated a couple of activities in which team members got the chance to meet each other and talk about experiences, aspirations, and next steps for their journey. This session lasted 3 hours.

Second Saturday: Sharing Saturday. On May 22, the FFH hosted an online session where teams had the chance to present what they had worked on during the first week and receive comments from mentors and fellow participants. We did this by setting up three different breakout rooms, and in every room, there were four participant teams and two non-participants who acted as mentors or commentators. However, all participants were encouraged to give comments to each other. After the breakout rooms, there was a quick common debrief with the six mentors, 12 teams, and the FFH team. This session lasted 2 hours.

Third Saturday: Communications Mentoring. On May 29, the FFH team hosted an optional online session on communications training. The objective was to explore creative ways to communicate the teams' process and work for the Showcase. In the first part of the session, the FFH team went through the last toolkit, "Communicate and Share", showcasing different examples and methodologies for presenting and communicating. Following that, we opened breakout rooms, and teams had the chance to discuss their thoughts with a mentor and with other fellow participants.

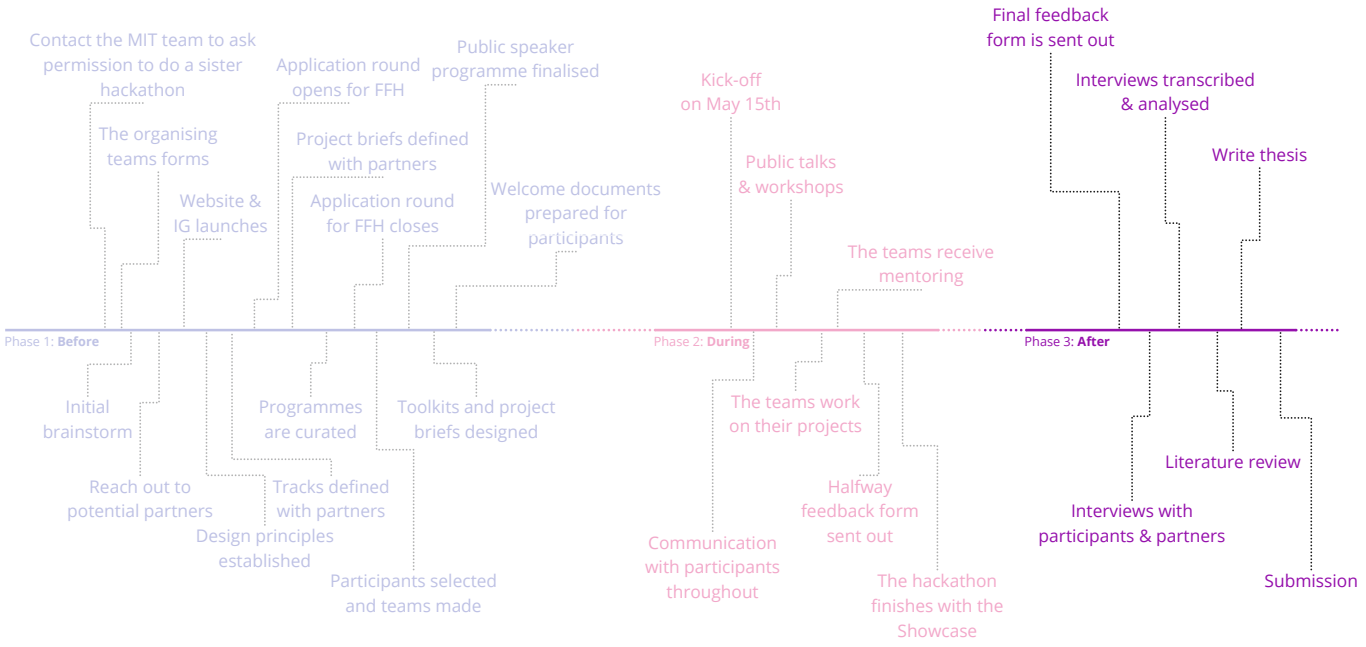


Figure 4.22: Feminist Futures Helsinki hackathon 2021 timeline. Phase 3: 'After' (2021).

4.4 Phase 3: After (Reflecting): On Outcome, Reporting & Continuation

This section will explain what happened during the first month after the Showcase.

After the Showcase, our community quickly dissolved into a state of early summer. Nevertheless, we collected the presentation slides from most of the teams and sent out a feedback form to which a fifth of the participants responded. In addition, we interviewed 17 individuals between participants, partners, and mentors in the two weeks following the Showcase.

As mentioned earlier, we had initially planned to offer a modest continuation grant to the teams willing to continue their project work. However, this did not happen due to a lack of human resources and no immediate interest from the teams. This failure to ensure continuation is something we will reflect on further in the discussion part of this thesis.

Since we could not pay the participants for their time and work due to the limited budget, we decided to make a little gift for everyone. We had a local illustrator make an art print specifically for the hackathon. In addition to this, the participants received chocolate and a notebook with a handwritten note from the organising team. The notebooks were hand-stamped with the name and logo of the hackathon.

On the weekend after the Showcase, we hosted a picnic in Helsinki, and the people who were able to join got to stamp their notebooks in our small make-shift outdoor crafting station.

The team behind Our Feminist Futures sent out a "certificate of recognition" for the participants. While we liked this idea, by the time the hackathon was over, the two of us had to transition into research mode to conduct interviews and the rest of our team had to attend to other work.

In July, we met with a group of participants interested in continuing with Feminist Futures Helsinki to brainstorm ideas for what could come in the future.

4.4.1 Perceptions of Process and Culture of the Hackathon

Based on eight interviews with 17 partners and participants, 11 participants survey responses, and the four highlighted projects, we reflect on the perceptions of the process and culture of the FFH hackathon. For the reflection, we will use the model that Porter et al. presented in their 2017 publication "Reappropriating Hackathons", where they analysed what was produced in the CHI4Good Day of Service hackathon and identified the following categories: artefacts, technical expertise, design process experience, social networks, affect, and hackathon identity (Porter et al., 2017).

Artefacts: What is produced?

"The technology solution is the easy part. Deciding which problem to solve in the first place is the hard part" (FFH participant, written feedback, June 4, 2021).

From the beginning, the FFH organising team let the participants know that we were not expecting any solution — and that they had the freedom to deliver whatever they felt represented their process and thoughts for the previous 2.5 weeks. As a result, the "outcomes" of the hackathon were very diverse. In the end, all the teams presented something that served as a starting point for discussions and next steps rather than a solution that attempted to solve everything.

Examples of the artefacts included an animated video, a proposal of next steps, a resource bank for educational and cultural content about the Sámi, and a UX redesign of a website.

We wonder how these artefacts may have differed if more teams had had direct lived experience with the topic they were addressing. In one instance, a team expressed that they struggled to connect with their project because they disagreed with the premise, questioning the legitimacy of their project's claim. Their own experience was the opposite of what they were presented with in the project brief. This made us think that perhaps it is easier to believe someone if you do not share those fundamental elements of your identity (e.g. you are not Indigenous) than if you do (e.g. you are a

working immigrant in Finland) but do not share the experience (e.g. struggles with Migri/the immigration services). In that situation, personal biases of that experience will likely affect how one perceives an issue presented by someone else.

Technical expertise
Many participants expressed that working in collaboration with people from other disciplines was positive and allowed them to collectively come up with perspectives they would not have reached alone otherwise.

"I've taken part in a lot of hackathons, but this was one of the only places where I met such diverse people who weren't only coming from a tech background. My team had sociologists, designers, researchers. It gave us the chance to work cross-disciplinary in a way in which your school doesn't allow you. Even in my team there was a sociologist, so that's such a different perspective because it enhances the value of our work so much more. Sometimes when I'm doing innovation work, a lot of it is assumptions. When you have someone who has such a deep understanding of how societies work, you have more weight" (FFH Participant, interview, June 4, 2021).

Some participants mentioned that the number of digital tools (Slack, Miro, Zoom) made it challenging for those unfamiliar.

Design process experience
The participant journey consisted of four phases: (1) Explore the context, (2) Reframe the Brief, (3) Imagine Feminist Futures, and (4) Communicate and share. In the interviews, some participants said that having the opportunity to reframe the brief gave them the freedom to focus on things that the partner had not mentioned initially.

"The fact that you gave us space to reframe the project, and when one of our mentors said that 'since you guys are in this hackathon you should value what you have worked on'. That was a strong point for us. Because that's when we as a team felt more geared up. And we realised that yes, we have that freedom to voice out what we have actually done and what we feel. In a good way, so that it's beneficial for the mentor. So that was a very good point that you gave us the freedom to reframe the project. That is when we as a team started working better. We were more motivated" (FFH participant, interview, June 4, 2021).

Some participants also referred to the toolkits as positive because, while the freedom on their focus was broad, the toolkits supported them in doing a value-check and helped them keep track of their process.

"The toolkit I used the most was Imagining Futures, that was very helpful to put in context. I liked that the hackathon was divided into those steps because it made it more graspable instead of having two weeks and then just present what you have, and it also gave you the feeling of "okay I achieved this step now", so you felt you already did a part of it and moved onto the next part. I think it was a very nice way to structure the time and content" (FFH participant, interview, June 7, 2021).

"The toolkits were very useful because it helped a lot to guide where we were going to discuss without going off on a tangent" (FFH participant, interview, June 4, 2021).
The main challenges about the topic were related to feeling like there was not enough time to explore the context and finding it challenging to pick a direction or concrete focus, given that the topic was so complex. One participant also responded that the most challenging thing to do was "Relaxing about the timeline, listening to my teammates. Valuing humanity as much as I've been trained to value business outcomes" (FFH Participant, written feedback, June 17, 2021).

We designed the participant journey in a way that would expose them to a plurality of topics and perspectives from different mentors and partners. Then, we asked participants how they had managed that plurality without getting too overwhelmed in the feedback form. Ten out of 11 respondents of the written feedback said that it was great to have a plurality of voices and diverse input, and one person responded that it was nice to get different input but that it made it very hard to decide on a direction. From these responses, we deduct that in the end, providing different mentors was something valuable for the participants, as they also mentioned in other parts of the feedback.

Social networks effect

Participants shared that it was valuable to get to know other people, meet community-based organisations in Helsinki, and gain a deeper understanding of what happened in their cities.

"It would be interesting to become part of the community [of the partner] and volunteer there. I have been thinking about that and definitely that is because of the hackathon. And also I think it gave me a better perspective of things that I didn't know were going on in Helsinki. I think it was very useful to get acquainted with my city and see what interesting things are happening for me in Helsinki" (FFH participant, interview, June 4, 2021).

Hackathon identity

We asked the participants about their teamwork experience, and we received many different responses. Some teams found it very easy to connect and work throughout the hackathons, as one participant wrote in the feedback: "I think the discussions on topic did the bonding. It was a lot of hours discussing together, which was good" (FFH participant, written feedback, June 8, 2021). Another participant shared that "the environment we created felt really safe, both of us were open to changing our approaches and/or opinions which made discussing the topics and implementation pleasant" (FFH participant, written feedback, June 9, 2021).

Others experienced some challenges in between and found a way to resolve the tensions at different points. For example, a participant described their teamwork dynamics as "Awkward, until I learned to listen instead of act!" (FFH participant, written feedback, June 8, 2021). Overall, we would like to highlight that the respondents' feedback showed a high awareness of dynamics and relationships within their team, the FFH team, and the partners when talking about the respondents' experiences.

Consciousness-raising

Overall, we identified many elements of consciousness-raising in the statements participants shared in the written feedback and interviews. For example, some of the statements included references to moments in which they reflected on their personal and team dynamics.

"I always considered myself pretty educated on intersectional feminism, but this hackathon has really surprised me. I realised... 'oh this is feminism put into practice'" (FFH participant, interview, June 7, 2021).

"For me, the most interesting part was observing our group dynamics and hierarchies take form. It was not pretty, but intersectional perspectives came in handy to understand it better" (FFH Participant, written feedback, June 4, 2021).

When asked about the biggest learnings or insights from the topic they were working with, a few participants referred to their personal process instead of the project.

"We all have preconceived ideas, we need a nudge to look beyond" (FFH participant, written feedback, June 8, 2021).

"Questioning own standpoints, got to learn more about the partners, topics and organisations in Finland working in those topics" (FFH participant, written feedback, June 8, 2021)

"This experience empowered me to connect and clarify multiple elements that made up my thinking. Finally, it offered spaces and resources for a personal emancipating breakthrough. It is both a priceless and highly valuable gift I received during this experience. Thank you for this gift" (FFH participant, written feedback, June 8, 2021).

Perceptions on Intersectionality

A question in the written feedback read: "Are there any topics you would like to see explored from a feminist perspective in the future?" Eight people responded to this question, and they mentioned: employment of immigrants in Finland, (inclusive) education, more inclusive-friendly municipalities, migration and gender diversity, STEM education, the Roma in Finland, Christian/Lutheran and Islamic feminisms, homelessness, employment for people with special needs, participatory democratic practices, public affairs, politics or electoral system, economics, restorative justice, technology, history, housing, forestry, and women's ability to return to the workforce after stopping out (other than maternity leave).

Figure 4.23: FHH participant answers to a question in the feedback questionnaire that asked "Are there any topics you would like to see explored from a feminist perspective in the future?".

In addition, one participant mentioned they would like to see a feminist approach to "housing, welfare state insofar as what are the normative subjects who receive for example welfare benefits and maybe in general heteronormative structures in our societies" (FFH Participant, written feedback, June 4, 2021). Another wrote about "the "coming of age" requisites of Finnish people, particularly regarding the (horrible) army tradition, driving licenses, moving out of home, deciding a type of highschool, etc." (FFH Participant, written feedback, June 4, 2021).

Our analysis of these answers is that it appears likely that the respondents saw the value in the feminist perspectives and the participatory format that the hackathon created. They believe that this combination could also bring value to all the other topics and fields they mentioned. Given that this list only comes from 20 per cent of the participants, we can imagine that the list could be even more extensive and inclusive of many other disciplines that are not currently engaging with feminist perspectives.

4.4.2 Recap of Participant Perceptions of Process and Culture of the FFH Hackathon

- Participants described feelings of empowerment and solidarity
- Participants described gaining insights into what feminism can look like in practice
- Participants expressed a desire to continue to connect with the FFH community after the end of the event
- Participants expressed an intensified desire to engage with their community
- Participants connected past experiences and knowledge with what they had experienced in the hackathon, which led to new insights
- Participants reflected on their situatedness and were mindful of acknowledging different positions and perspectives of team members, organising members, and partners
- Participants applied not only feminist perspectives to their projects but also their own processes and journeys

4.5 Lessons, Insights and Challenges from Selected Projects

In the following section we will be highlighting four selected projects covering three out of the four tracks. The projects we have chosen to highlight were selected based on our study specialties and personal interests. We believe this selection of projects offers an insight into the breadth of topics that were addressed in the hackathon. The selection does not reflect any kind of hierarchy.

4.5.1 Project Example no. 1: Cities Built for the People

The first group of the Urban Futures track received the following brief from the feminist urban planners FEMMA Planning: "Inclusive participatory planning: Cities built for the people. Even if people are able to participate in urban planning, participation doesn't automatically mean that the city becomes more inclusive. How can we plan so that the default is not (only) a white able-bodied white-collar man? How can urban planning better take into account people that are often excluded from the decision making processes?"

The members of this team had a background in human-computer interaction, arts and education, and industrial and temporary design. Although none of them had a background in urban planning, they all had interests concerning places and the city from their different fields. Their interests and research focus include

- participatory practices;
- involving everyday environments and seeing how they relate to knowledge and different ways of knowing;
- exploring the effect that objects in the city can have on people's behaviour.

When they started working on the project, the team quickly identified the power disparities that created difficulties for participation in urban planning. "Urban planning was a very hierarchical process", they said in their presentation, "meaning that architects, designers and urban planners have more power at the time of taking decisions than the people living in the area" (FFH Participant, Showcase presentation, May 31, 2021).

When they were referring to their process, one of the team members said: "Very often, terms are used and misused in ways that do not serve their original purpose. Especially inclusivity and diversity have been used by many organisations and institutions to describe their activities but in reality, they are not being inclusive nor diverse in their communications. For example, plans or information being published only in Finnish language, that happens a lot of times here in Helsinki. Exploring projects that claim

inclusivity we realise that the activities specific to time and project rather than to consistent and long-term actions. In the project, we argue that in order to achieve inclusive cities, we need to strengthen bonds, in relationships and consistently and long term" (FFH Participant, Showcase presentation, May 31, 2021).

From the initial brief they were given, they reframed it to "Make cities more inclusive when it comes to participating in urban planning." The explanation for the reframing was that "in the process of participatory urban planning there is a lack of access to the information, lack of exposure to ongoing activities, and lack of a sense of ownership from the side of the community." (FFH Participant, final presentation, May 31, 2021) The team considered that these elements were necessary for the inclusion and active participation of the citizens of the area. For that, the participants expressed that they would be" going back one step in the conventional urban design. Fostering relationships between the people and the spaces beforehand will create a stronger engagement in the community. This engagement will serve as a foundation for future projects and activities, ensuring that people are interested in active participation" (ibid.).

The team said that they wanted their proposal to go beyond a one-time event. They argued that "consistent practices of engagement, relating and knowing, eventually lead to communities of people (...) that are involved in ongoing engagement benefits us all, in being motivated, and more involved and participating in the shaping of our environments" (FFH Participant, Showcase presentation, May 31, 2021).

Their proposal was a set of activities in which dwellers could meet and use postcards as methods to express how they felt related to the space they lived in. They envisioned a process where the community could gather and use the postcard method to share and manifest their voices, thoughts, and concerns. That space could eventually transform into something else. Analysing who are in the positions of power and domination in participation and urban planning, the team proposed activities that would strengthen community bonds over time.

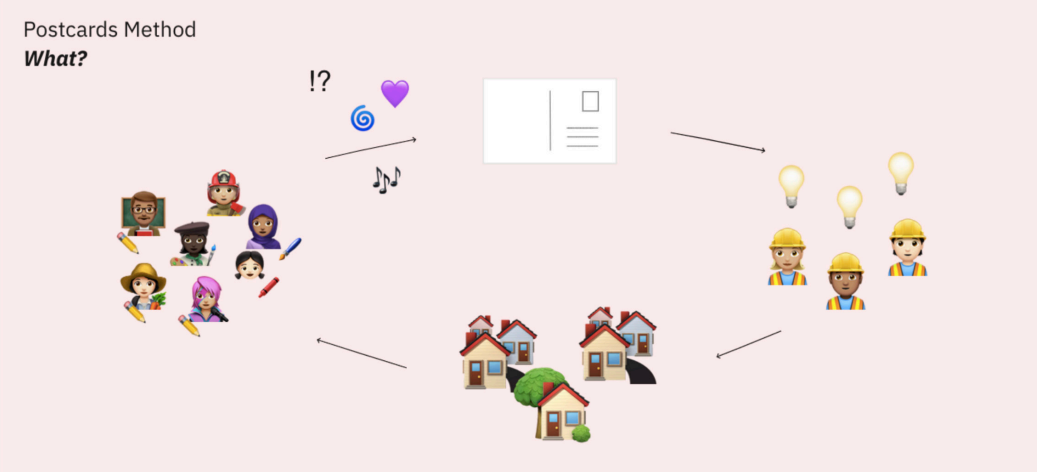


Figure 4.24: Elements of the Postcard Methods, from the team's Showcase presentation.

Cities built for the people: Implications for Real Estate

These are our takeaways from the Cities built for the people FFH case and how it contributes to the real estate field:

1. The team showed understanding that the key to resilient cities serving the people is the **long-term and ongoing community-building process**. This is consistent with one of the principal shortcomings for social sustainability in land use planning shown in Rashidfarokhi's study. It was illustrated how the municipality of Lappeenranta had not maintained ongoing engagement with different interest groups and had not promoted environments for continuous learning (Rashidfarokhi et al., 2018).

2. The team also centred topics of accessibility to their proposal. They demonstrated being **reflective of different meanings of "accessing" participation in urban planning**: language, level of awareness on planning topics, medium of participation, time availability to participate, and different ways of knowing and understanding. An expanded understanding of accessibility is also consistent with values of situatedness and embodiment (D'Ignazio & Klein, 2020; Haraway, 1988). Understanding accessibility in this variety of positions could be helpful to enhance social sustainability in land use planning. Rashidfarokhi's study showed how the municipality of Lappeenranta had used minimal communications channels, had published the information only in Finnish, and the way to encourage participation was heavily focused on written forms (Rashidfarokhi et al., 2018).
3. The team's proposal had elements of **art as means to sustained and inclusive community engagement**, and art has also been identified as a key element in the social inclusion theme to reach social sustainability in land use planning (Rashidfarokhi et al., 2018).

Figure 4.25: Insights on the team's working process. The image shows some thoughts on the importance of inclusion in urban planning and some of the team's research findings.
Screenshot from Miro.

4.5.2 Project Example no.2: Inclusive Lapinlahti

The second group of the Urban Futures track received the following brief from Lapinlahden Lahde: "Inclusive Lapinlahti". Lapinlahti is an area by the sea in west Helsinki, close to Ruoholahti. The main building in Lapinlahti used to be an old mental psychiatric hospital, but now, three different companies rent the spaces from the City of Helsinki. One of them is Lapinlahden Lähde, the partner organisation that proposed the project and mentored the team. Lapinlahden Lähde is an organisation that subleases spaces mainly to non-profits, hosts community and cultural activities to support arts and mental well-being.

The project idea they gave to the team had three different prompts for the team to choose from or combine as they wished:

- **Collaborative Lapinlahti Platform**: How to engage people and organisations of Lapinlahti to share and combine their expertise even more and participate in the

co-development and joint decision making of the Lapinlahti area and its future?

- **Safe and Inclusive Lapinlahti Space**: How to develop Lapinlahti and its premises physically and psychologically to feel even more welcoming, accessible, inclusive and safe for its tenants, volunteers, visitors and everyone?
- **Increased Lapinlahti Influence and Impact**: How to connect the Lapinlahti community and its activities and offerings even better to the surrounding society and service network, make the Lapinlahti community even more known, acknowledged and appreciated among the relevant stakeholder groups, increase Lapinlahti's positive impacts and measure and communicate these impacts?

In their search for an approach to their vision, the team initially focused on working with Lapinlahti's organisational structures. One of the assumptions they had was that participation among the community members and the organisation could be improved if the structure through which members communicate was studied and analysed.

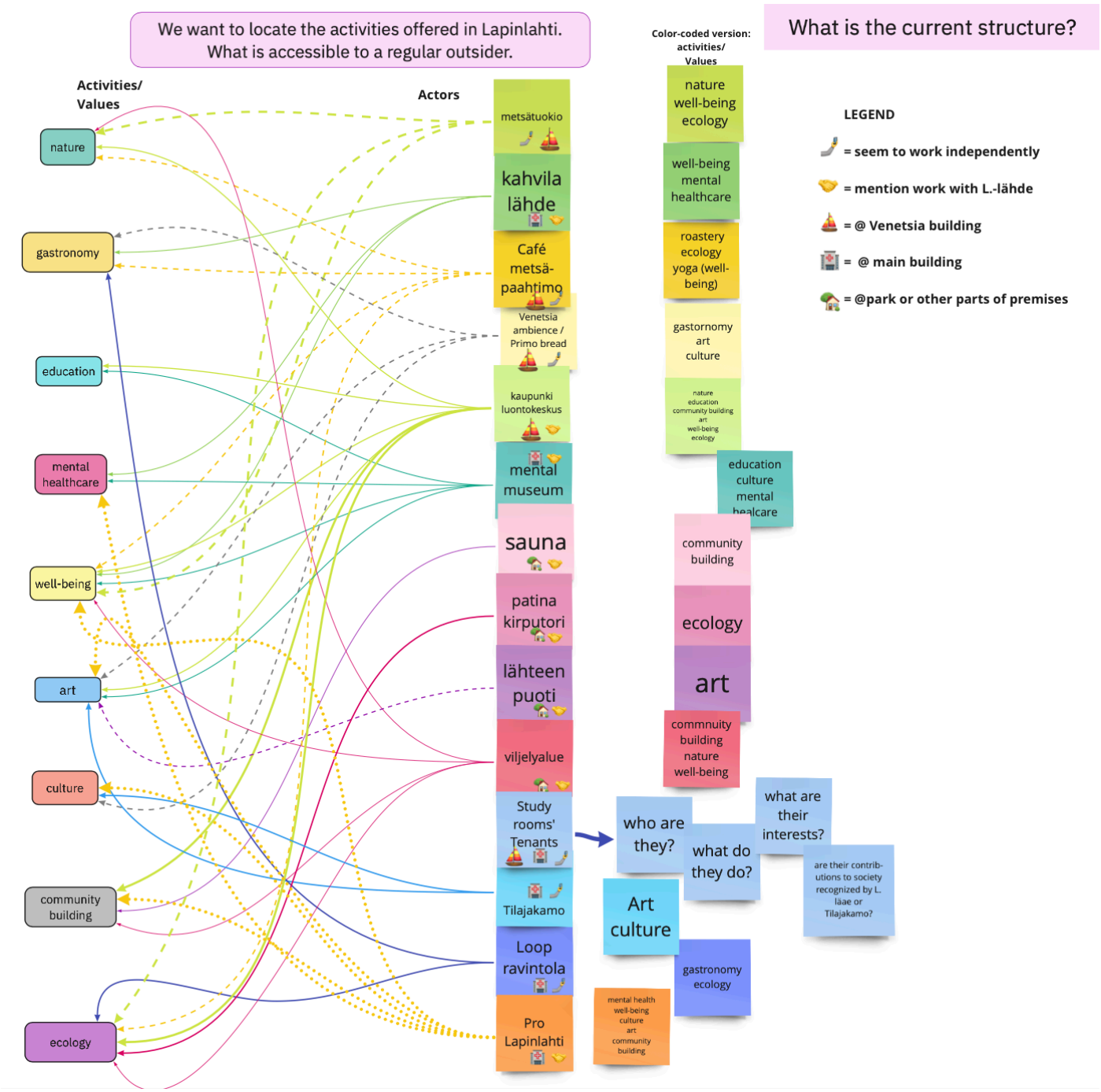


Figure 4.26: Insights on the team's working process. The image shows how the participants mapped synergies and values among different interest groups in Lapinlahti. Screenshot from Miro.

One of this team's interesting turning points was a mentoring session with our partner from the Museum of Impossible Forms. They pointed out that, since part of the struggle was coming from the fact that the land was city-owned, an essential thing to counter was finding out how to make Lapinlahti visible as a place of value so it would not be under the constant threat of disappearing.

Another exciting highlight from this team's journey was that they gained a lot from the cross-disciplinary sessions with the other teams. In one interview, the team reflected on how, during a mentoring session, they saw how one group had thought of many questions for their project, such as "*who is going to be affected by what?*". One of the team members told us that "there was someone [from the other team] who was a bit more experienced in design processes, I had no idea about any of this, so it helped a lot, and I wanted to do something like that" (FFH participant, interview, June 4, 2020). In that sense, they said that the sessions "helped as a comparison of "what can I do better, so it served as an example" (ibid.).

Another point to mention about their journey is that this team went very quickly into finding solutions for the challenges from their brief. They shared with us: "we went to Lapinlahti on the first day, and we wrote a document, and then we thought 'okay, we are done with the whole thing'. But after then, the first toolkit came out, and we were like 'uh.. well, not really, we didn't even have to do that. Nobody is asking for documents (...) this is not a solution, first of all', so it helped to give perspective" (FFH participant, interview, June 4, 2021).

The team believed that, as outsiders, they should not decide what the changes that would make the Lapinlahti community more inclusive were. As they shared in their final presentation, they grounded their work on the premise that "*solutions should come from the community who is using the space*". What they proposed in the final presentation was a series of workshops: (1) ecosystem mapping, (2) visioning, and (3) implementation. They saw these as methods for horizontal communication to enable the community to decide what they wished to do with the space.

The first workshop they proposed was an ecosystem mapping, a creative, intersectional group tool to better understand the context and resources of Lapinlahti. The aim of the ecosystem mapping workshop was to map the context (problems and resources) and the opportunities for improvement that led to the thematic workshops on visioning and implementation. The workshop included the following steps:

1. Getting to know one another: Sharing perspectives, backgrounds, role in Lapinlahti, and the "ideal Lapinlahti" vision.
2. Mapping the physical Lapinlahti: Walk-round-the-block activity What are the plus and minuses of the Lapinlahti landscape? How are people affected by the space?
3. Discussion: Key issues and problems lived in the community. Who is/should be benefitting from Lapinlahti? Who are/should be in command of the conditions for the success of Lapinlahti?
4. Synthesis: From the intersectional approach (cf. Relief maps)
5. Conclusions: How to continue?

After the ecosystem mapping, they proposed the visioning workshop, which would include prompts like: *"What does the community want for Lapinlahti? How can these organisations present to the City? And how can Lapinlahti's contract insecurity be dealt with?".*

The aspects of the workshops proposed by the group have many similar elements to those organised by Col·lectiu Punt 6, especially with the awareness workshops and the urban walks.

In addition to the workshop guidelines, the team also presented three different proposals on potential activities and touch-ups, ideas for changing the image of Lapinlahti, and ideas of potential events to enhance community building and spaces for socialisation.

Inclusive Lapinlahti: Insights on the context, history and culture of Lapinlahti
Subchapter 3.2, "Real Estate, Land Use & Urban Planning", showed how global trends of public real estate privatisation have also reached Helsinki. Consequently, it puts at risk the traditional role that Finnish municipalities have had in ensuring socially responsible use of public real estate (Hyötyläinen & Haila, 2018). Traditionally, Finnish municipalities have prioritised the public over the private benefit of publicly-owned real estate (ibid.). However, it has become increasingly challenging to differentiate what interests and incentives drive both sides in recent years. In the Lapinlahti case, this question becomes even more challenging to answer. As discussed in section 3.2.2, the City of Helsinki organised a competition for private real estate companies to develop the Lapinlahti area. The winner was NREP, a company that wanted to build two five-story buildings and a hotel; however, the sale never happened.

Ville Pellinen, the CEO of Lapinlahden Lähde, told us that "if [property developers] don't recognise the diversity and plurality of values, and only look at the financial sheets (...), one might think that [Lapinlahti] could never give much money"(Ville Pellinen, interview, September 17, 2021). However, Lapinlahti does contribute considerably to society. We asked Pellinen how to reconcile this clash of values, indicators and incentives between them and real estate developers. He answered that, "what we do as a social enterprise is not to maximise profits for the owners. We can never fully compete with those financial sheets. What we *can* show is that if one can talk money, we generate a lot of long-term financial benefits and good revenues for societies" (ibid.).

For example, Lapinlahti provides many employment opportunities for people who might not be considered competitive in the so-called competitive market. To illustrate this, Pellinen explained that people struggling one way or another with employment find a place to work in Lapinlahti. It has been shown that at the beginning, some might have the ability to work two days a week. However, after some time (one, two, three years), their working ability has improved, and they are able to work full weeks. Another example of their contribution is that they take care of the building and surroundings and offer services, spaces and activities to help people battle loneliness and generate well-being. Despite all this, back in 2019, the City of Helsinki still organised the competition as a "part of a strategy to offload nonessential city property" (Glanville, 2020).

When we asked Pellinen why the NREP sale never concluded, he said that there was a paramount movement from the civil society groups. People responded in solidarity to defend Lapinlahti and demonstrated, signed a petition (over thirty-three thousand people signed it), and even made a human chain around the Lapinlahti buildings. However, this big social movement could have never happened if the community had not been active and connected for the last decades. Indeed, the significant civil society response does not come as a surprise if we consider that Lapinlahti has had a tradition of having strong networks and community groups, like the Pro-Lapinlahti Association that was founded in 1988 and still exists (Ville Pellinen, interview, September 17, 2021). Regarding possible future collaborations with NREP, Pellinen shared that "there would be room for responsible and property development in the future. The problem was that the plans from the property developers didn't respect the plans what it means to the public enough" (ibid.).

The response of Pellinen, when asked if the proposals given by the FFH team had been

relevant, was very positive. As introduced earlier, the FFH team had proposed a series of workshops to enhance participation and social cohesion in Lapinlahti. Pellinen considered that key to making sure that they move in a direction that benefits their main stakeholder groups; (1) the people who are part of Lapinlahti and (2) the people they are serving, those who come as visitors, guests, and customers. As shown, the networks and community are the first steps towards solving differentials in incentives and values.

The series and ideas of workshops that the FFH team proposed were also considered necessary and aligned with Lapinlahden Lähden's next steps: Creating the Lapinlahti Foundation (Lapinlahden Lähde, 2021). The proposal is a joint venture funded by the City of Helsinki, the State of Finland and by different associations and companies in Lapinlahden Lähde. The foundation's purpose is to strengthen the public-private-people alliances and benchmark with other cities in Finland to show how places like Lapinlahti are not only the fruit of municipal decision-making, not only for private profit, not only a non-profit, and not only an association. Pellinen reflected that "if real estate can realise the plurality of values and things for identity in Helsinki, some real estate developers could also take part in the Lapinlahti foundation. How can we maintain the value of developing this, and developing renting activities?" (Ville Pellinen, interview, September 17, 2021). He then concluded that participatory activities, like the ones proposed by the FFH team, helped make this plurality of values visible.

Inclusive Lapinlahti: Implications for Real Estate

These are our takeaways from the Lapinlahti FFH case and how it contributes to the real estate field:

1. The team demonstrated being **reflexive of their positionality and the risks that they could pose by proposing a "solution" as outsiders**. Therefore, all their work was based on how to support that decision-making to come from within the Lapinlahti community, which is consistent with design justice values (Costanza-Chock, 2020). This also relates to the recommendations of FEMMA Planning of avoiding commenting, deciding and reproducing narratives on communities as outsiders and leaving the space for them to decide (Ogbeide & Kallio, 2021).
2. The ecosystem mapping workshop shared the same elements of raising individual and **collective decision-making** as in the awareness workshops from the Barcelona-based Col·lectiu Punt 6 (Ortiz Escalante & Gutiérrez Valdivia, 2015), and have the typical elements that encourage feminist consciousness-raising.
3. As shown in the Figure 4.26, the team developed an **in-depth analysis** of the **diversity and different incentives** and understandings of value that different actors in the Lapinlahti community had. This resonates with what Pellinen, Lapinlahden Lähde's CEO, identified as **key to build private-public-people alliances that include real estate developers.**
4. The team showed that the priority was community building and equitable decision making. That resonates with the importance of **building networks and enhancing community participation** highlighted in the social sustainability elements in land use planning in Rashidfarokhi's study (Rashidfarokhi et al., 2018).
5. The team demonstrated having the sensitivity of considering **issues of power relationships within participatory activities**. This can be related to the need of considering different cultural values in land use planning in Rashidfarokhi's study. In that study, it was shown how the city of Lappeenranta had not specified how safety was considered in participation, perhaps because it was assumed that Finland is a country where there is freedom of expression. However, it has been seen how this perception of universal equality can sometimes be harmful to dismantle hierarchies (Rashidfarokhi et al., 2018). The FFH team, in turn, considered how the power hierarchies would appear, for instance, if people who rented a space

had to decide in the same session with the people they rented the space from or between employers and employees. This is also consistent with suggestions from *Data Feminism* that warn that **if the environment for data collection is designed in a way that amplifies existing power imbalances, the data will reflect a very narrow representation of reality** (D'Ignazio & Klein, 2020).

6. The team benefited from being mentored by different community organisations, as they got insights from different perspectives that allowed them to add a **more holistic perspective** to their contribution. This is consistent with the recommendations for **multidisciplinarity thinking and action in the real estate field** (Toivonen, 2021; Toivonen & Viitanen, 2015), and with the need to **recognise the labour of the non-governmental work** to alleviate the welfare crisis driven by globalisation (Berglund, 2007).
7. The team benefited from **cross-pollination** with other teams in the mentoring sessions. This demonstrated that it is possible to create environments where participants can **collaborate rather than compete**, as it was found to be a potential risk of using future thinking tools between real estate students (Toivonen et al., 2021). In addition, Toivonen (2021) expresses the importance of the role of the facilitator in future thinking methods but advises that the facilitator influences can be dominant, contributing to showing the views of a specific group only. This case showed how incorporating different mentors, and facilitators contributed to **diversifying the narrative, increased participation**, and enabled knowledge to come from different people.

Summary of implications to Real Estate from the Urban Future FFH cases

The empirical data from the analysed FFH hackathons offer encouraging findings for the sustainable development for the real estate sectors in multiple ways. Hackathons that use feminist-infused participatory practices can offer valuable insights to the field by:

1. Enabling **critical thinking** and **questioning of power structures** between the intersecting areas of the built environment and other societal fields.
2. Enabling more **diverse participation** that can combine insights from different disciplines and experiences to offer more *'future-proof'* interventions. This comes from demonstrating how situatedness and the consideration of different experiences is a skill that makes practitioners stronger and more prepared to come up with more holistic and functional solutions.
3. Demonstrating that people that do not have real estate or urban planning related educational/professional background are equally capable of contributing to the conversation of the future of such fields, and their insights can help **enrich outdated and siloed practices in the field**.
4. Enabling different methods that lead to visualise the diversity in which different people can understand and experience value. Consequently, it can help challenge and **overcome traditional and narrow understandings of value as something purely commercial** and push practitioners in the real estate field to redesign incentives and operations that are sensitive to these different positionalities and experiences. This is seen especially necessary in **private-public-people partnerships**, in the light of the danger that global neoliberal trends have on public real estate policy.
5. Enabling the Finnish real estate sector to overcome the narrative of universal equality and safety and **dismantle the different inequalities that the built environment perpetuates** and that prevents the whole sector from being truly transformative.
6. Supporting the **strengthening of societal networks, partnerships, and opportunities** for collaboration that go beyond opportunism and performative participation and seek long-term community engagement.

7. Finding ways of promoting future-thinking learning environments for real estate students beyond academia, that support them to interact with practical cases and connect with local interest groups. We argue that if the agenda for futures-thinking is set by different community organisations, it can give a chance to students and teachers to benchmark current assumptions and methods to these diverse environments. This can have considerable implications for traditional education institutions, as they can have more **tools to create knowledge and encourage practice that is sensitive to all the complexities that current global challenges bring to the field.**

4.5.3 Project Example no. 3: Strengthening Sámi Allyship

This project was part of the Eco-Justice track and was one of two projects co-mentored by representatives from the two Sámi groups Ellos Deatnu and Snowchange Cooperative.

** Sápmi is also known as Lapland. However, since this is the colonised place name with a condescending history, we will be referring to the area as Sápmi.*

Ellos Deatnu is an activist group consisting of local Sámi from the Deatnu area in Sápmi* (on the border of Norway and Finland) as well as other activists. The group "resists the new Deatnu Agreement and supports the self-determination of the Sámi people and their local governance of the Deatnu area" (Ellos Deatnu, n.d.). The Deatnu Agreement relates to fishing rights on the Tana river in Deatnu.

In an Indigenous feminist analysis of the Ellos Deatnu movement, Rauna Kuokkanen, Professor of Arctic Indigenous Studies at the University of Lapland, argues that "rather than civil disobedience, Ellos Deatnu represents an endeavour to move beyond normative conceptions of nation-state, its colonial and patriarchal institutions, laws and practices and conventional Indigenous politics" (Kuokkanen, 2020). Kuokkanen describes the principles, values, and practice of the Ellos Deatnu movement as "post-state Indigenous feminist sovereignty; a deliberate engagement in 'alternative' modes of organising beyond the state, drawing on pre-existing governance practices and structures while questioning the violence of settler colonialism and its concomitant heteropatriarchy" (ibid.).

Snowchange is an organisation based in Finland that was started "to document and work with local and Indigenous communities of the Northern regions" (Snowchange Cooperative, n.d.). The organisation's headquarters are located in the boreal village of Selkie, in North Karelia, Finland.

The organisation has a lot of traditional knowledge and stories on handicrafts, fishing and hunting, and other elements of forest culture. Snowchange Cooperative is also a network that brings together people from many Indigenous cultures worldwide, such as Inuit, Inuvialuit, Inupiaq, Gwitchin, Icelandic, Tahltan, and Maori (Snowchange Cooperative, n.d.).

Snowchange Cooperative runs a re-wilding programme in different regions in Finland, works to protect and promote cultural heritage in fishing communities, and, importantly, publishes academic research on different environmental topics. We highlight the latter because of the ongoing struggle to have Indigenous knowledge recognised in academia.

The project in the hackathon was prompted with the following brief: When it comes to Eco-Justice, Sámi people have long known and told what the issues and solutions are in the Finnish context. However, unfortunately, the Sámi communities have been historically and systematically silenced. Them being a minority, with only approx. 8,000 — 10,000 Sámi people currently living in Finland, their concerns and struggles are neither heard nor addressed in mainstream discussions. How might Sámi

allyship be improved in Finland? What kind of support can non-Sámis provide for the communities?

This project was one of the more sensitive ones in the hackathon. While each project in some way concerned one or more vulnerable or minoritised groups, the premise of this project was instantly very personal for whoever would be asked to work on it. From a planning perspective, it was essential that we had the right partners involved and that we were able to present a variety of perspectives on the matter. The two Sámi mentors were from different Sámi communities, in different parts of the country, and had different professional backgrounds. They were able to provide feedback from different points of view, but with a shared goal of decolonising Sápmi.

The process for the team was very much about learning and understanding and not jumping straight into action. The team understood this and understood that the burden of education should be, first and foremost, the burden of the non-Sámi people. They also explored the potential role of allies to enable rest for activists, seeing as the population is so tiny, and most often Sámi activists are activists out of pure necessity and for the survival of their culture and livelihoods.

The participants all had some level of knowledge about the Sámi people, but they expressed that none were aware of the full extent of the political aspect before the hackathon. One participant shared the following statement with us in an interview after the hackathon: "I knew a little bit [about the Sámi] because I lived in Norway for a little while. So I at least knew that they exist, but I had no idea about the political spectrum and the silencing that's going on. How they have to fight for their rights. And I knew a little bit about other Indigenous [peoples], especially the Turtle Islands or the United States. They are quite vocal and have a big audience. So I knew a little bit about how they deal with Indigenous wisdom and science. But then, how it developed, it got way more personal to actually know some people now. And their struggles. I think that helped a lot to identify and have more sympathy, empathy and compassion for the topic. Also the knowledge itself... (...) It came more from a place of curiosity. And now I feel like I have at least some tools to dive deep into the topic and be an actual ally" (FFH participant, interview, June 8, 2021). This quote, we believe, speaks to the importance of the partners and mentors of the programme. This is the exact reason why we thought it so important to work with community and grassroots organisations who have lived experience, understanding, and knowledge of the topics at hand. This is also an example of consciousness-raising: "In consciousness-raising, individuals share and listen to personal experiences of oppression (often having to do with stigmatised topics), connect those experiences to structural and political forces, and leverage new understanding to build solidarity across differences and toward political action" (D'Ignazio et al., 2020). The team also recognised a fragility for non-Sámi's when it comes to Sámi allyship and a (justified) lack of trust from the Sámi community towards so-called allies. This is not a challenge with a simple answer or solution, but rather a complex matter requiring an intersectional and multifaceted approach to improve the situation.

The team explored what it means to be an ally and, in particular, what it means to be an ally to the Sámi community. They came up with the following initial insights and ways of being an ally to the community:

1. Self-educate
2. Support Sámi artists
3. Boycott companies using Sámi land
4. Be mindful when you travel to Sápmi
5. Do not pull the focus onto yourself
6. Take part in climate action

One team member reflected on the fifth point: "Do not pull the focus onto yourself" in our interview with them following the hackathon: "After the mentoring session we kind of had a discussion that day. I think we got the idea of making an Instagram page from this mentoring session, and we kind of had a discussion about it. We thought 'okay, maybe it's not the best way to go', especially when our project was on allyship, and the discussions we had were also revolving a lot around not doing this performative allyship. And we felt like making an Instagram page about allyship seemed like it might have the risk of becoming this performative action" (FFH participant, interview, June 8, 2021).

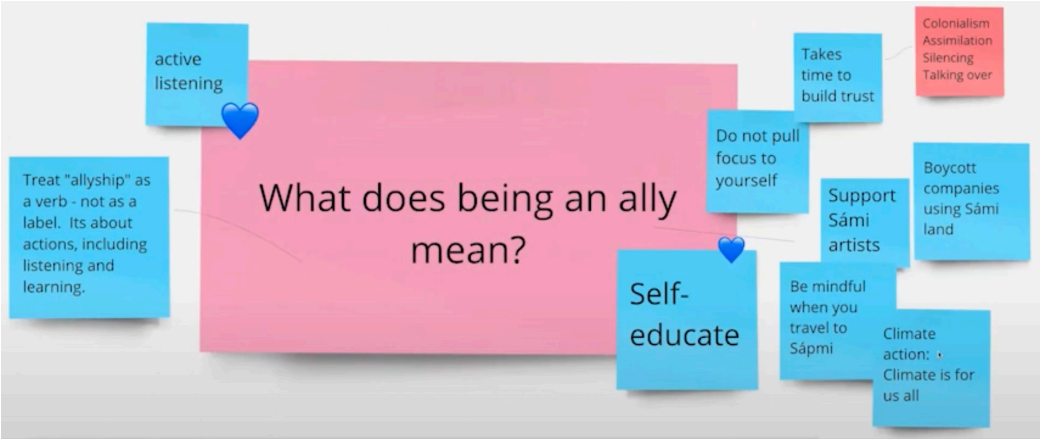


Figure 4.27: Insights on the team's working process. The image shows the participants thoughts on what it means to be an ally to support the Sámi struggle and agenda. Screenshot from Miro.

The team also explained how they started with the idea of active listening. That meant listening to the mentors but also nourishing their own curiosity. They started reflecting on the acquired norms of coloniality that are embedded in all of us through culture. This can be a challenging task at first — a bit like recognising the size of an ocean while you are swimming in it. However, this was one of the biggest tasks of this project: The inner work. The team was inspired by the saying: "Allyship should not be thought of as a label or identity but rather an action or a verb". This correlated to their reflections about allyship, not as a one-time thing but as ongoing action.

In their final presentation, the team explained how they imagined an appropriate way to start the allyship journey would be to investigate your own life: your profession, your hobbies or interests, your friends and family, and your political activity. How do some or all of these relate to Sámi people? Again, this approach has elements of consciousness-raising.

Figure 4.28: Insights on the team's working process.The image shows the idea for their final outcome: A compilation of resources to strengthen solidarity and allyship. Screenshot from Miro.

The team ended up compiling a Sámi allyship starter package. The package was presented in a Google Doc that can grow with time and has suggested readings, podcasts, films, artists, music, social media accounts, and more. The idea is that before even being able to understand how a non-Sámi person fits into the puzzle, they must understand the history and ongoing political situation and environmental struggle faced by the Sámi community.

Following the hackathon, when asked about the team's understanding of the project in relation to feminism, one participant said the following: "Feminism is about equality, and the Sámis are definitely not equal. And their understanding of the world, and how they are oppressed and silenced and pretty much erased from the Finnish landscape. That's why it's obviously a feminist issue" (FFH participant, interview, June 8, 2021).

Another team member shared the following reflection: "I think there's been a massive change [in how I think about Sámi issues] actually. Even though I kind of knew things about the Sámi people, and was kind of... my background is in linguistics, and I've had to kind of familiarise myself with the Finno-Ugric languages in general, but also I was always kind of interested in Sámi languages. So I kind of knew a lot about the languages, and the structure of the languages. Which are still spoken, and which languages are spoken where, and these sorts of things. But what the hackathon kind of gave me, was to have a more comprehensive understanding of Sámi people's struggles. Because I feel in the linguistics world, people tend to only talk about the languages, and how you can revive the languages. And how people learn, and how you can teach the language to children whose parents maybe already lost their language and this sort of stuff. During the hackathon I got more insight into the political struggles like land ownership, livelihoods, the fishing rights, and the relationship that Sámi people have with nature. I feel like this was something I really appreciated, especially from the mentors" (FFH participant, interview, June 8, 2021).

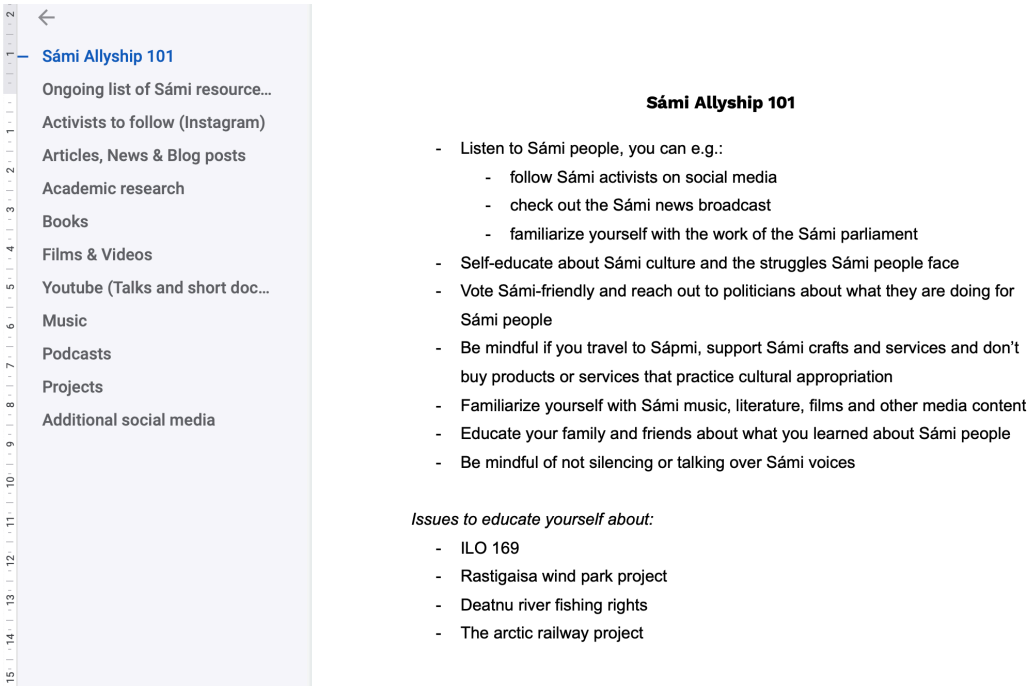


Figure 4.29: The Sámi Allyship 101 document.

Overall, the team approached the project with a lot of respect, sensitivity, and curiosity. They expressed a few times along the way that they struggled a bit with the idea of their output/outcome simply being 'gained knowledge'; however, as the programme progressed, they appeared to understand and feel more at ease with this kind of approach.

This project was a great example of how recognising what you do not know can be an essential first step to being a more engaged practitioner and active citizen.

It can be questioned whether the Sámi community benefited from this work — we do not believe it is possible to draw any conclusions in this short term. However, this is clearly an important element. Nevertheless, based on the team members' statements, we believe it is fair to assume that they will be more conscious of Sámi issues going forward. In addition, their relation to their two mentors will make them more likely to engage politically in conversations and actions, e.g., Sámi sovereignty and land rights.

4.5.4 Project Example no. 4: Enabling Age-inclusive Participatory Communities

This project was part of the Well-Being Futures track. The team for this project received a brief from the City of Helsinki, which prompted them to consider ways in which seniors could be more involved in society as active volunteers rather than passive receivers of services. In addition, the team explored how the concept of volunteering — giving your free time to activities that need help — could be expanded beyond this initial framework. The team was mentored by a service designer at the City and several external mentors in the hackathon.

During the hackathon, the team interviewed a few senior residents aged 60-75 to find out what volunteering means to them, their motivations, and how they imagine that might change in the future.

Through the process of talking to the interviewees, combined with the mentoring the team received, they realised that they needed to widen the scope of their inquiry beyond just "volunteering". They found that there was a risk that the seniors might be perceived as passive receivers of volunteering opportunities again. Following these reflections, the team explored why seniors are seen as more inactive in society. They found that seniors are frequently not seen as people who can both care for and be cared for by their communities. This binary approach limits what could potentially be created and shared and also prompted the question: Who can teach whom?

Through mentorship from one of our partners from the Museum of Impossible Forms, the team was challenged to consider whose interests, experiences, and benefits they were centring as they imagined alternative futures. *Was it the City's or the residents'? Was it a question about having people engaged for financial reasons or about having a dignified life?* Questions like these forced the team to realise that their role in a project like this could never be neutral, and it pushed them to lift themselves out of the research for a moment, to reflect on what they were doing.

Early in the process, the team decided to move away from the organisation-centric idea of volunteering and move towards ground level community action and focus on it through the lens of peer learning; what knowledge might be shared between generations? One of the mentors invited the participants to reflect on their own experiences with intergenerational relationships, reminding the team that "if we are not ourselves able to find intergenerational companionship, how can we create that for others?".

Another important topic that came up during the mentoring sessions was that of cultural imaginations. As the team was starting to imagine what the future might hold in the Finnish context, they asked: "*How can we learn from other cultures when it comes to community building and elder-relationships?*". However, the team was warned that references like those, although not ill-intentioned, might backfire as this narrative

around different cultures might also be used to justify segregation politics. Using the language of imagination battle/imagination collaboration (see section 3.3.1), we might consider this situation from the perspective of immigrants in Finland. These stereotypes and assumptions around community and 'elder-relationships' in other cultures would constitute an imagination battle: Immigrants would have to fight against the imagination that someone else has created about their lives and cultures. Therefore, it was important that the team did not use these narratives or make assumptions about family structures without reflecting on the potential unintended consequences it may have for the communities they were trying to help.

In one of the mentoring sessions, the team was prompted to reflect on how volunteering might be reframed. For example as:

- Valued citizen engagement
- Expert knowledge
- Experiences
- Collaborations

In the end, the team reframed their project from simply focusing on how to get more seniors to volunteer to a much more expansive exploration:

- How might we challenge traditional views of labour?
- How might we increase the autonomy of seniors?
- How might we build and nurture inclusive and diverse communities?
- How might we encourage intergenerational connections?

They stated that they aimed to provide and enable residents instead of pushing them to move away from top-down, organisation-centric volunteering towards grassroots level community action and peer-learning.

The team identified four key areas of importance:

1. **The value of public spaces**
   - How might existing spaces such as libraries best be utilised for these purposes?
2. **Accessibility and safety for all**
   - Activities and opportunities should be easy to join in for all, independent of their ethnicity, social or economic standing
3. **Socialising and helping others are the main motivations**
   - Feeling that you serve a purpose and that you have something to offer has proven even more important since the beginning of the COVID-19 pandemic
4. **More heterogeneous and organic settings**
   - Joining activities and community work should not feel obligatory but something that grows organically

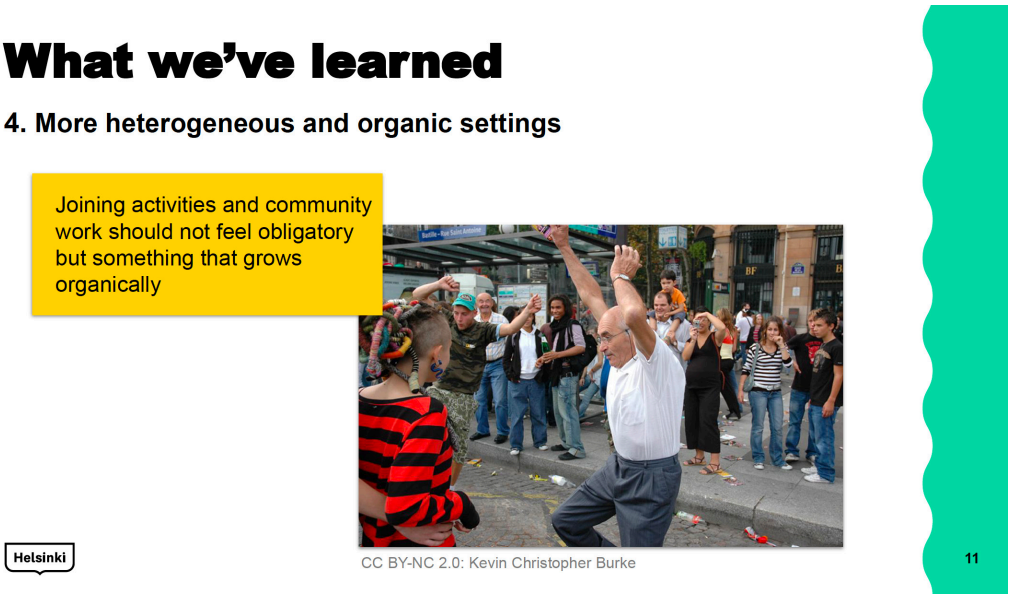


Figure 4.30: The team's key learnings. Screenshot from the team's Showcase slides.

As a response, the team developed the following four steps to move towards the feminist future they imagined for seniors in Helsinki:

1. **Community co-creation**
    - Learn from the community about the community. "Invite community members from across different age groups to sit down and identify what skills they have" (FFH participant, Showcase presentation, May 31, 2021). With an increasingly ageing population also comes developments in what seniors can do. Seniors today are generally much more mobile and able to participate in activities than they were a few decades ago
    - Shift the narrative from a passive give-and-receive to a mutually beneficial experience for all
    - Aim to bridge the gap between the community and the spaces in the city
2. **Engage through key skills**
    - Once the key skills are identified, pilot programs can be designed and tested. The team identified the following initial opportunities:
        - Language learning for non-Finnish speakers
        - Indigenous traditional skills
        - Trade skills
        - Digital skills from younger mentors
3. **Develop safe and accessible spaces**
    - The team identified that this shift would require a number of dedicated people who can adapt the existing spaces to enable the peer-learning logistics
    - It was also identified that this process should include active education of volunteers on topics such as anti-racism and inclusion of all community members
    - When possible, and when it seems like it would benefit the community, these activities could be offered in multiple languages
4. **Reflect, iterate and evolve**
    - Population dynamics will undoubtedly change over time, so these programmes must be constantly reflected upon to stay relevant, inviting and inclusive.
    - The City should consider incentivising the time and skills for active community members in the future.

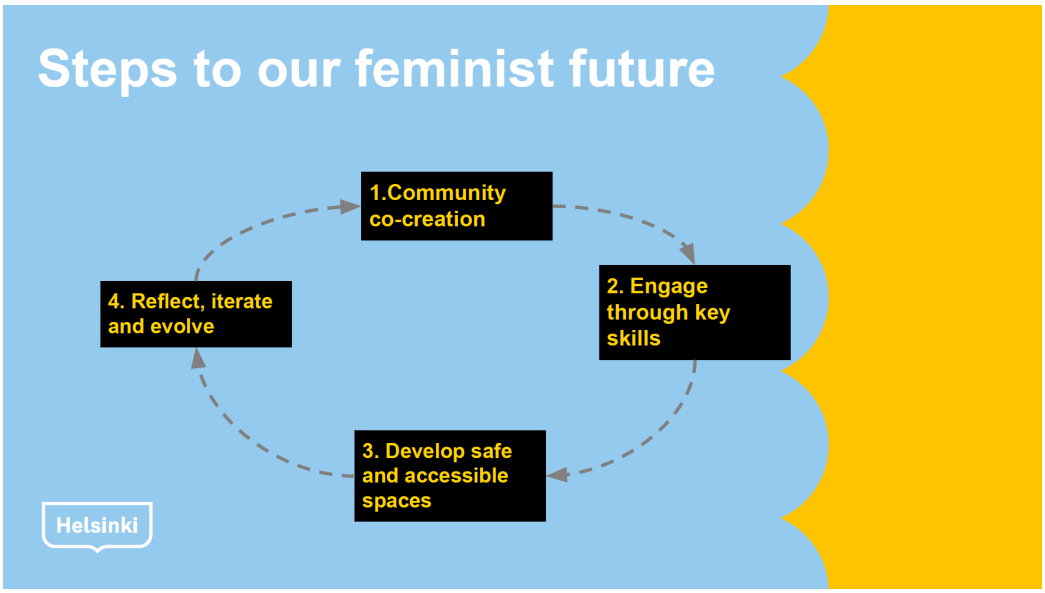


Figure 4.31: 'Steps to our feminist future' from the team. Screenshot from the team's Showcase slides.

Questions about views on labour inspire questions about time. Time is a privilege which not all people have. "And that is not necessarily going to stay the same in the future. A huge thing is that a lot more people might need financial help in the future, and they might not give that privilege of time and skills for free" (FFH participant, Showcase presentation, May 31, 2021). Discussions about increasing volunteer activity assume that people are financially comfortable and able to donate their time. This opens up an exciting conversation about what we value as a society. The knee-jerk reaction to the proposal of paying for what, from the City, was intended as "volunteer" work would probably be: But if it is paid, it is not volunteering. However, it offers an essential invitation for us to reflect on what it means when we expect certain demographics to give their time and skills for free. Why is that time and skill not valued, and whose responsibility is it to value it if not the institutions built to support our infrastructure?

Although this project brief seemed to have a somewhat clear path laid out, it was great to see how the team challenged that and brought in considerations of class, culture, ageism, labour dynamics, accessibility, anti-racism, and intergenerational companionship. The team's analysis and reflections on these intersecting realities exemplify how a multidisciplinary approach and an intersectional feminist lens offer holistic proposals for future scenarios. Furthermore, by engaging with feminist *who-questions,* the team challenged existing power structures, which prompted them to reflect on their positionality.

Chapter 5

Discussion

5. Discussion

In the two previous chapters, we have attempted to address the following research questions through a combination of literature review and feminist-infused participatory and action research:

(1) How might hackathons be designed with feminist values and principles at the core to facilitate creative forms of participation for socially engaged design practices?
(1.1) What are the benefits and challenges of applying feminist values and practices in hackathons?

(2) What are the benefits, and who are the beneficiaries, of bringing together multidisciplinary teams to work on projects proposed by community organisations?
(2.1) How might the emerging insights from this work serve as a bridge between intersectional feminism, real estate, urban planning, participatory design approaches, and the Finnish hackathon scene?

In this chapter, we will reflect on twelve major themes that have come out of this work:
1. Terminology and feminist buzzwords
2. Notions on value in real estate and the opportunity of multidisciplinarity
3. Reflections on social sustainability in land use planning
4. The thematic scope of the hackathon
5. Establishing partnerships
6. Participant experiences
7. Low-tech and no-tech solutions
8. Ideology vs reality
9. Time = money
10. MIT & Aalto
11. Preaching to the choir
12. Accessibility of online events

5.1 Terminology and Feminist Buzzwords

A recurring theme throughout the entire thesis process has been terminology and (feminist) buzzwords. It has been and continues to be an ongoing learning process that has required a lot of reflexivity and discussion. We see this process as learning how to balance choosing our words intentionally and carefully and acknowledging that we have conducted all this work in English, which is neither of our first languages. Although conducting the work in a foreign language is not an excuse not to learn more accurate terminology, we have experienced how there will always be nuances that will be understood or translated differently. We argue that perhaps it should not only be about the specific terminology but also about emphasis. So if something is significant, it is essential to spend the time and energy to say that in a few different ways to ensure getting the meaning across. This section will share some of the reflections and discussions we have had throughout the past six months.

An un-hackathon

We discussed how we still called it a hackathon, despite its many differences from a tech hackathon. This choice of terminology might have negatively affected, for instance, how many people decided to apply or who was interested in partnering. We believe there is reason to assume that some people would have rejected the idea based on this label and all the connotations it carries. This made us imagine and wonder if we should have called it an unhackathon instead, to communicate upfront that this was something different.

"Using words from different spheres and disciplines also allows us to enter other spaces and to challenge those spaces, rather than just leaving them as they are"

One of the participants reflected on this in an interview, saying that:

"Even if you mention on your website that the hackathon is not a space specific for programmers, my friend only suggested it to me because I study software engineering. Thinking about it now that the event is over, I would have so many friends who would be happy to participate and could bring a lot. I really like [that] it was named 'hackathon' but I just wonder if the word is "reclaimed" enough in a way that it is still approachable to people who think it's only about programming." (FFH participant, interview, June 7, 2021).

Using words from different spheres and disciplines also allows us to enter other spaces and to challenge those spaces, rather than just leaving them as they are. In an interview, one of our partners reflected on the potential of this:

"(...) In the startup world, it's still like... there's isn't much talk about feminism. So although the structures are shit and we won't change it by going that way, to a certain extent, I still think there is a need to push these kinds of topics to be discussed in the innovation and startup sphere. (...) Because they think that they are not ideological or political. They think: "this is just neutral, and money is the answer". But that's not true, they have their own ideology and politics behind their thinking as well. But they make it seem like feminism is an ideology that they do not take part in. But no one is pointing out that they do have these ideologies and that they're embedded in all their structures" (FFH partner, interview, June 3, 2021).

Words that trigger

On several occasions during this process, we encountered instances where our use of words triggered people. For example, *inclusion, diversity, equity, and civic participation* meant different things to different people. Some people thought of '*inclusion*' as a word that refers to the patronising behaviour of deciding who, when, and how somebody can be included. For others, '*inclusion*' did not have negative connotations.

A similar critique was directed at the discourse around '*centring*' and '*giving voice*'. Likewise, there is a critique of these terms because they hold a particular element of power (someone has the power to centre or give voice to someone else). However, the antithesis to this is a power that is not positioned anywhere and comes out of nowhere. As we have established with Haraway's 'god trick' (1988), that is not possible. In the context of organising or hosting an event, that power will come from those who will make the decisions that will either include or exclude. For example, when we said we wanted to '*centre the voices of community organisations*', that centring included leaving space for the agenda-setting. So we, the organisers, reached out and invited certain groups (community organisations working on equity matters). However, we then left it up to them to set the agenda, such as deciding the project ideas or the content of the public talks. This way, they could exert power to say what was important to bring up. This is closely related to the definition of women's empowerment we introduced in subchapter 3.2: "Empowerment does not mean giving power to someone; but acknowledging the power that individuals and groups excluded from political action already have, and finding mechanisms that can enable the right to exercise their power" (Ortiz Escalante & Gutiérrez Valdivia, 2015). More information on how we established those partnerships can be found in section 4.2.

One partner challenged our use of the term '*civic participation*' and '*innovation*', posing questions such as "who is benefitting from civic participation?" and "civic participation

towards what?" (FFH partner, interview, June 4, 2021). She questioned the need for constant innovation that seems to have penetrated our society, stating, as Sasha Costanza-Chock did in *Design Justice*, that "if we think about civic participation, that is something that has happened since forever. (...) So what is innovative about people coming together, trying to find solutions to their problems?" (ibid). She added:

> "That's why it's important to understand why you want civic participation; because you're not wanting the participation to maintain a representative government. Because then you would not technically need civic participation in the same way, if a representative government worked. But since [a] representative government doesn't work, and we're seeing the lack of [progress], then what we need is pushback where people are organising for their own well-being. So I would disrupt this question of thinking about it as "innovation" and instead think about it as learning from the heritage of our social behaviour" (ibid).

As discussed earlier, we have learned from this experience that there are often no "one-size-fits-all" or magical words that can fix that situation. Words matter, of course, and whenever possible, they should be carefully chosen with attention and consideration. However, sometimes we felt it was more useful to explain what we wanted to convey differently. Therefore, we ensured to explain the meaning in several ways instead of finding the one word that could fit all situations and perceptions.

The reflection on the complexities in terminology also extends to the field of the built environment. For example, is 'social sustainability' more accepted in urban planning than 'equitable' or 'feminist'? Being aware of the different triggers that words have can help connect with different audiences, but it should not prevent us from making connections and learning from other fields, just because they are not called the way we always call them.

5.2 Notions on Value in Real Estate and the Possibilities of Multidisciplinarity

The forces of change, megatrends, and world challenges affect all peoples and all sectors — however, the difference in how values are understood determine the incentives and responses from every sector to that specific challenge.

In real estate, dominant ways of reducing value to something commercial are supported by methods that rationalise value as indicators and estimations resulting from complex operations that cannot be fully understood by the people it affects. However, the effects of the real estate industry in our built environment are evident and very tangible, and it is relatively easy to understand what does not work if we consider how different interest groups experience and engage with the built environment. There, the understanding of values is expanded and diversified.

A clear example of this can be found in the Lapinlahti case. The Lapinlahti area is developed and understood by the community through a multitude of values: social, environmental, cultural, and economic. For example, as the pandemic has highlighted, countering loneliness and taking care of one's mental health is vital. The Lapinlahti community appreciates and values that that space offers activities and connections. The natural surroundings support their well-being, which also has economic benefits. We discussed how Lapinlahti supports people in developing working skills, represents a place where people strengthen their well-being and takes care of the physical environment. However, these do not always fit in quarterly reports. How might the graphic made by the FFH team that shows the diversity of values for the Lapinlahti community (Figure 4.26) be combined with the graphic of "Real Estate Investment Return and Risk Spectrum', by

Geltner and Miller (2001) (Figure 3.9)? *How can we bridge those clear benefits and activities to a system that uses other structures to count value and risk?*

Under the narrow focus of commercial value, investment operations are reduced to numbers but, as D'Ignazio and Klein present in *Data Feminism*, "numbers don't speak for themselves" (D'Ignazio & Klein, 2020). Indeed, a lack of context, traceability, and transparency makes it difficult for people to understand and be aware of what determines the real estate decisions that will impact their lives. However, this is not a challenge that happens only in the real estate sector. In recent years, there have been many voices that urge us to understand and challenge the role that different sectors have in perpetuating systems of oppression by deciding and operating based on what is perceived as "neutral and objective" data (see Criado-Perez, 2019; D'Ignazio & Klein, 2020; O'Neil, 2016). While it might sound discouraging to hear that this is such a structural problem, we believe it also poses an opportunity to learn from learnings and successes in other fields. For example, what could real estate practitioners learn about efforts towards A.I. literacy, explainability and accountability?

It is not a novel suggestion that the real estate field has to pursue methods of transdisciplinarity. For example, Toivonen and Viitanen shared this reflection on 2015:

"Because the forces of change affecting the different parts of society are mostly the same, the commercial real estate market should be seen as an element that is constantly exposed to the influences of other fields and is not a separate unit that is immune to the changes happening in the rest of society. This is a specific notion that should be kept in mind when planning real estates and their future land use. What it means in practice is that phenomena possibly affecting real estates should be searched widely and the conductors of the studies should not only concentrate on information sources that are common to them and originate from their ownfield. Cross-disciplinary research attitude is indeed needed" (Toivonen & Viitanen, 2015).

"Situated, feminist and equitable frameworks to guide participatory action research strengthen the intellectual position of real estate practitioners because, in practice, it expands the possibilities to tackle those challenges"

We want to build on that and highlight the importance of considering the '*who*'s, '*how*'s, '*why*'s, and '*what*'s of that cross-disciplinary research. For example, if the research is done primarily from a traditional academic perspective, it might risk missing the sensitivity of context and the perspective of key interest groups. Situated, feminist and equitable frameworks to guide participatory action research strengthen the intellectual position of real estate practitioners because, in practice, it expands the possibilities to tackle those challenges. We see this as something urgent for the industry, especially after seeing how cities around the world, Helsinki too, are being pushed to apply neoliberal ethos to public real estate policies.

5.3 Reflections on Social Sustainability in Land Use Planning

We presented the research of Rashidfarokhi et al., in which they studied how social sustainability appeared in practice and land use planning (Rashidfarokhi et al., 2018). According to their research findings, the conventional collaborative methods are not sufficient on their own, and new measures are needed in order to achieve social sustainability planning processes (ibid.). Based on the literature and case findings, we argue that feminist-infused participatory and action research initiatives are not only helpful but needed and crucial to overcome the gaps between legislation and implementation of social sustainability practices in urban planning.

The learnings about being critical and questioning power structures could be beneficial in picking a direction to start addressing the failures to accommodate several factors from social sustainability in land use planning, as presented in Rashidfarokhi's case study. For example, in the category of "community participation", the study found that the "community was informed through the minimal number of channels, including a local newspaper, a notice board in the town hall, the city's website and letters to titleholders in the planning area (...) Participants could express their opinions in written form within a specific period when the planning documents were publicly available or at the town hall meetings" (Rashidfarokhi et al., 2018, p. 19). We have learned from feminist theory and praxis that connecting individual experiences to collective ones is crucial to identify patterns and demand action. However, the analysis of those patterns should be done by the community itself. We have also learned that the venue and who facilitates the participation matter.

In the discussion of their study, Rashidfarokhi et al. shared how especially social cohesion and capital had insufficient measures to be analysed due to the lack of strong "bridges and linkages between interest groups and the municipality" (Rashidfarokhi et al., 2018). This also resonates with the findings and reflections that groups shared in the Urban Futures track of the hackathon. Probably influenced by the design decisions of the hackathons, participants in the Urban Futures track identified very quickly how differentials in power appeared in practice in the project briefs they had given. That also contributed to understanding their positionality and extending their awareness of what they could (not) do to contribute to their environments given the current frameworks. Reflecting on what they could not do seemed particularly important, as it pushed them to identify the points that need improvement for better participation structures. In addition, as some participants mentioned in the final feedback and the interviews, the experience of working with local organisations in the hackathon gave them more insight into things that were happening in their community, and they felt encouraged to join future activities — both with FFH and with the partners.

Events like the hackathon could create opportunities for collaboration between planners, municipalities, other relevant stakeholders, and the communities affected by the planning. Thus, they could progressively strengthen the needed networks to ensure social sustainability in different urban planning matters.

5.4 Thematic Scope of the Hackathon

The FFH hackathon had 12 projects (described in section 4.1.4) divided into four tracks (Urban Futures, Inclusive Futures, Well-Being Futures, and Eco-Justice Futures), and the 50 participants were divided into 12 teams. This meant that each team only focused on one project.

Having 12 projects meant coordinating at many levels with our partners, such as co-designing the briefs, curating a public programme relevant for all, and planning the mentorship sessions accordingly. However, our initial motivation was to shed light on how diverse the projects can be regarding social justice and to centre the work of as many community-based organisations in Finland as possible.

In an interview with Alexis Hope from the MIT hackathon team, we enquired about how her experience in transitioning from mono-thematic (on breast pumps and reproductive justice) to a multi-thematic hackathon (on prison abolition, environmental justice, the caring economy, and reproductive justice). Her answer resonated with the reasons we also had to develop an extensive thematic scope:

"The reason we decided to broaden out the topic was because when we were originally planning Our Feminist Futures, it was going to be focused on menstrual equity. That was the topic we were thinking of before COVID happened. But I think the pandemic revealed, or made visible, all the many different overlapping inequities and connecting social issues that we're dealing with right now. And especially the murder of George Floyd in the US. So that made us want to create a space where people could come and explore interconnected issues. Because we didn't think there would be as much appetite for having a really narrow focus on one particular topic when it felt like everything was on fire. We wanted to give people a space to engage where they were fired up" (Alexis Hope, interview, August 20, 2021).

We believed we did not have to be experts in all 12 projects to acknowledge that these are issues in society and that it is expected that people want to have spaces to discuss them. There were benefits and struggles with organising 12 separate projects. The results we got from the feedback make us believe that, in the end, the advantages exceeded the difficulties in coordination as we observed very high awareness by part of the participants on what fields could benefit from feminist-infused participatory practices and action research.

In section 4.4.1, we described how one of the questions in our final participant feedback was: "are there any topics you would like to see explored from a feminist perspective in the future?" The fact that participants gave such a broad scope of answers (ranging from the Finnish military service to history or forestry) suggests that what is needed to advance equity in practice in other disciplines is to have the spaces to discuss and collaborate, like the one the hackathon provided. Spaces and activities in which the setting, prompts, and structures support participants' learning process, connecting, and relating to their familiarity and interests. That is, in the end, the same concept behind the consciousness-raising groups and activities presented in subchapter 3.1.

The ability to be self-aware also showed in the surveys. Participants appeared to think of intersectional feminism as a tool to explore the topic they had been given and as a framework to become aware of their positionality and their teamwork and dynamics.

5.5 Establishing Partnerships

This section explores different insights in partnership building: time, communication, co-liberation and expectations.

Establishing partnership — On time

In creating the hackathon, we followed a very open and participatory process where we wanted partners to shape the event with us. However, that kind of work requires time to show up in meetings, imagine, propose, and design together. Moreover, having time to spare is a privilege, which may lead the most privileged partners to have more time to shape the event.

How could we have countered that if we had resources? Money! If we could pay the partners more, there would probably be a more equitable playing field for participation. The same principle applies to compensating participants for their time and labour.
With the limited budget we had, we tackled it (with partners) by setting a potential for different levels of engagement based on time capacity. Each of these should already have time requirements set and salary. They were (a) to help develop the project ideas/tracks and mentor the teams, and (b) to show up when possible and needed, for instance, for a talk or a mentoring session.

Establishing partnerships — On communication
Through dialogue with our partners, and especially after one conversation with our partners at the Museum of Impossible Forms, we learned that communicating values, expectations, and possibilities clearly was crucial when trying to partner with organisations that would not have the privilege of time. In addition, coordinating partnerships with 21 different people/organisations helped us be more precise in our communication.

Establishing partnerships — On co-liberating partnerships
Perhaps the constraints mentioned above of time and money signalled that we need alternative co-liberating partnerships: types of mutually beneficial collaborations that work towards a common goal (Costanza-Chock, 2020; D'Ignazio & Klein, 2020). In a conversation with Alexis Hope, one of the organisers of the MIT hackathon, it became clear that universities could play a vital role in this future of possible anti-oppressive relationships. She asked: "How could universities make themselves useful to community groups, way beyond hackathons?". We speculated about types of relationships that go beyond the follow-up and about building long term multilateral partnerships.

"That's as fast as we can go. And our impact can be as big and powerful as our trust is"
(brown, 2016)

The conversation with Alexis left us wondering: How might our educational institutions use their institutional privilege (when it comes to knowledge production and access to funding) to do more real and practical-based work beyond one-time projects?

This type of question on acting upon institutional privilege resonates with one of the tensions presented by Catherine D'Ignazio (2019). As we recall, D'Ignazio described a situation with an Advisory Board member, expressing frustration at how easily the team could obtain funding for their project (D'Ignazio, 2019, p. 4). From that experience, D'Ignazio leaves two questions for discussions that we believe are relevant for this case too: (1) What do anti-oppressive funding models (that still involve academics or academic institutions) look like?, and (2) Can people in HCI leverage racial and institutional privilege without reinscribing it? (ibid.).

Managing expectations with partners on the outcome
In subchapter 3.4, Culture and Politics of Hackathons, we saw how often partners participating in these events expect to see a prototype by the end of the event. Because we aimed to counter solutionism, we communicated to our participants many times that we were not expecting any finished products. However, it is reasonable that some partners might have expected more of a finished product and not just a discussion — a fair expectation given that they are investing their time and mainly without economic compensation. This poses a question for further reflection: how do we balance co-learning and not rushing to conclusions with still satisfying the partners? How could we redefine value for them?

It is also important to acknowledge that, historically, academia has followed rather extractivist methods when approaching grassroots organisations (D'Ignazio, 2019, p. 3). In a conversation with Alexis Hope, she told us that they had found value in thinking of relationships with community organisations not as something one has to follow up with but more as relationships that need to be nourished over time without necessarily knowing what the outcome will be.

Building better relationships with grassroots organisations go hand in hand with thinking what extended structural support might allow more people impacted by those issues to participate in the hackathon itself — given they wanted to. For the future, we think that

one way to organise hackathons in a way that can benefit more partner organisations would require: (1) an extended framework of time to operate, (2) money, to compensate partners and to support the participants in being able to contribute further, and (3) less diversity in projects, to allow for a more extensive collection of people who are directly influenced to participate in these events.

5.6 Participant Experiences

In the following section, we will discuss reflections on participant experiences.

The flexible nature of the project briefs

During the hackathon, we experienced that participants with different backgrounds thrived to varying degrees with the flexibility of the briefs they received. It seemed some people found it easy to have a flexible brief and have the freedom to decide what the outcome would be. As a result, there was a sense of agency, and we could, for example, tell that the people with designerly backgrounds were more comfortable shaping their projects and 'staying with the trouble'.

However, we also experienced that others struggled, with the open-ended briefs almost becoming a barrier to participation for some. We would assume that those people might sometimes feel like they are failing or not doing good enough.

We wonder, how might we make space for both? How do we make space for the freedom for those who thrive in such flexible situations and provide enough structure to make it a good experience for those who perhaps come from less creative backgrounds?

In some of these cases, what we did was offer extra mentoring sessions and a kind of 'life line' to both of us. We provided a few teams with additional calls and support when they felt stuck with the projects. In all these cases, we could alleviate the concern and help the teams move forward feeling confident. However, it would be good to develop a better way to accommodate these types of situations. We considered if it would be an option to create two different kinds of briefs, but in the end, we decided it would probably be better instead to ensure we create a space in which it feels safe to speak up when/if the participants are struggling. An essential element here would then be to make sure that the community is ready to respond to it. A team of volunteers would be convenient here. Indeed, the MIT hackathon had a big team of volunteers with different skill sets who could help the teams if need be.

"In essence, the most marginalised and most oppressed people still do not have a way to participate. We wonder: Is this a limitation we have to accept about the hackathon format?"

This made us think that in any future hackathons we may organise, participants from this year who are willing to engage in future initiatives could support future teams, as they are now experienced with the process and know the struggles that may arise. The volunteers could also provide skill-based support, like visual design, interviews, among others.

To whom is the hackathon accessible?

These considerations about how different participants experienced different elements of the hackathon as a barrier also made us reflect, once again, on to whom the hackathon is accessible. We spoke to Alexis Hope about this, and she told us that even though they had been able to pay participants in Our Feminist Futures, this remained a question mark. In essence, the most marginalised and most oppressed people still do not have a way to participate. We wonder: *Is this a limitation we have to accept about the hackathon format? Can the potential value of*

the hackathon outweigh the fact that even with the best intentions and most extensive effort, we may still not be able to fully live up to our ideals and values of centring the people who are usually pushed to the margins of society?

Beyond financial accessibility, there is, of course, also physical and mental accessibility. Our hackathon took place online which eliminated any physical barriers. However, the cognitive load was still heavy, and it required many hours spent in front of a screen. In the future, we may want to consider how this aspect could be made more accessible. We will reflect further on this in 5.10.

Participants with direct experience

One of the aspirations we had when organising the hackathon was that we would like to engage people with direct lived experience with the issues at hand. In the end, due to the nature of how the project briefs came together (people applied before knowing precisely what the projects would be), this ended up not being the case for many of the teams. However, it still made us reflect on the requirements and risks if more people with direct experience had participated.

"Whatever the question, the answer is in the community"
(Kimberley Seals Allers)

As the team at MIT experienced in their hackathon Make the Breast Pump Not Suck in 2018, talking about personal experiences of oppression, harassment, struggles, and stigma can be intense and triggering (D'Ignazio et al., 2020). It would be essential for us to have people on our team who were qualified and ready to deal with such situations. The fact that we had so many different topics in play may have made this difficult.

In addition, the fact that we did this in an online setting is also a factor that may have made some people feel less safe to open up.

Journalist and entrepreneur Kimberley Seals Allers says: "Whatever the question, the answer is in the community". So why run a hackathon like this, where many participants were not part of the community they were "solving" an issue for? We will not claim to have the answer for this, but we would still argue that there is value in learning from this kind of process, participating in consciousness-raising, and creating a space where connections and relationships across disciplines and backgrounds are possible.

Long term impact

We encourage and value long-term systems change over the solutionist approach that often values tech over a community and systemic impact. Consequently, we have also been wondering how we might extend the hackathon experience — but also if this is something we should even attempt. Finally, we wonder: *What is the role of the hackathon; to be a catalyst or a long term supporter?*

D'Ignazio et al. (2020) describe an initiative they took in one of their hackathons, which encouraged the participants to set goals and hold themselves accountable. They had prepared postcards "that participants wrote to themselves during the event. The postcards described individual and collective commitments to postpartum justice and were mailed to participants by the organisers three months after the event".

One concrete action we took was setting aside a small budget to support the teams who wanted to continue their projects. We thought this would be a helpful way to encourage teams to keep collaborating with the partner organisations. However, despite this offer, no teams decided to take it. We believe that this is partly because

neither the partners nor we had the resources to engage in further discussions and imaginations of what could be done in the future. As soon as the hackathon ended, we entered June and July — two months during which the country is more or less on pause due to summer holidays — which likely also affected people's willingness to continue.

5.7 Low-Tech and No-Tech Solutions

The fact that we encouraged low-tech and no-tech solutions made it less clear to the participants what expertise they were expected to bring. We as organisers encouraged participants to approach their topics from whatever their background was, using whatever skills they had. At the same time, we were not saying that technology is harmful and cannot solve anything — we simply challenge the idea that technology alone can solve systemic issues. For example, one cannot solve racism with technology if the system in which one is developing the technology is inherently racist.

However, this decision also brought the tension of expertise (as explained in 3.4.3). The framework's flexibility meant that we sometimes wondered how much we should push the participants to follow the design process we had created with the toolkits and the Journey. When should we back off and push further to ensure the teams got all the benefits out of the process?

The absence of the tech focus also placed a lot more value onto topical expertise and other skills. For example, one participant expressed the value she had found in this by working with a sociologist in her team, saying it brought such a different perspective and enhanced the value of their work. She even said, "Sometimes when I'm doing innovation work, a lot of it is assumptions" (FFH Participant, interview, June 4, 2021).

The shift in focus to value topical knowledge more intentionally opened up a new challenge related to team formation. One of our partners spoke to the importance of being aware of this dynamic when designing the hackathon framework: "Which structures are you enabling at what time of the hackathon, when you're trying to bring in people who might not be aware of specific dynamics, topics or questions? Then you need to be very clear about how you plan the whole structure. (...) Knowing also, how do you integrate teams that will have different levels of expertise within them. (...) So even if the whole team is not aware of everything, you can count on the team's expertise. (...) So when you're deciding who goes with whom, then there would need to be skills and points of interest and certain topics that you're knowledgeable about" (FFH partner, interview, June 3, 2021).

"As many organisers of participatory design projects experience, democratic and liberatory ideas can be difficult to achieve in practice"
(Hope et al., 2019, p. 2)

5.8 Ideology vs Reality

When we started to organise the hackathon, we had many ideas and values that we wanted to live up to. For example, inspired by our sister hackathon at MIT, we wanted to pay all the participants a stipend to compensate them for their time and work. However, in the end, our budget was so limited that it was not an option.

We also wanted to make sure that the participants were exposed to different inputs from different mentors, the public talks, and the toolkits. However, given that almost all participants were also working or studying full time during the hackathon, the density of the programme left little time for teams to have group discussions.

In the end, we also just had to admit that given we had less than eight weeks and only two people to coordinate all partners, mentors, and speakers, it was too much to coordinate. During the hackathon, we also had to communicate to the 12 teams daily about who had mentoring when and with which partner(s)/mentors; some days had up to eight different mentoring sessions. This responsibility was incredibly draining, and we underestimated the emotional labour that goes into this kind of work.

Considering these inconsistencies between ideology and reality, we wonder: *Is a hackathon a suitable format for this kind of study?*

We reflected on this in our conversation with Alexis Hope. She shared that in the case of Our Feminist Futures, she felt like everybody learned a lot, which was what she cared most about. She added: "It kind of depends what you are hoping the outcomes of the hackathon will be. Because if the goal is to create some sort of sustainable project, then I don't know that the hackathon is necessarily the best container to do that. It might be a good container to get something started, but I think you need other follow-up. Maybe hackathons could be embedded in other structures that provide funding and time for people to actually carry forward their work" (Alexis Hope, interview, August 20, 2021).

5.9 Time = Money

During the hackathon, we had often said that one of the things we have appreciated the most was people showing up to be having difficult conversations. However, showing up does not come for free — it has a cost, too. We have been reflecting a lot on how the time invested in participating in hackathons might be taken for granted, especially for students, assuming that they might be more likely to have time to spare. In the section of critiques to the culture and politics of hackathons, we learned how some corporations might overburden participants to take personal responsibilities for the decline in civic resources (Gregg, 2015).

Time is another tension, which prompts the following question: "How do we think beyond and outside of the timelines of single projects?" (D'Ignazio, 2019, p. 15). We valued people showing up to discuss the issues presented in the hackathon, but we were also left with the feeling that the time in the meetings, and the overall time scope of the project, was not enough. How could one possibly have the time and resources to explore the underlying socio-political context behind every project idea in only 2.5 weeks? This time frame is not enough, and we believe that this signals the need for rethinking what type of collaborations could emerge from ethical partnerships that are mindful of historical trust tensions and can work towards mutual benefit. *How could we think of time as something beyond a one-time project?*

The question of partnerships brings questions about funding and how limited budgets make this even more difficult. For example, in our case, with the limited budget we had, we decided to allocate the majority of it to compensate mentors and speakers. Unfortunately, this meant that project owners, the participants and the organising team could not receive any salary. As D'Ignazio reflected in 2019, at the end of their hackathon, the amount of time and emotional labour put into it felt like it was under-compensated (D'Ignazio, 2019, p. 5). In the case of the two of us, the authors, we worked 10-16 hours/day for more than two months with no payment. While this was, of course, by our own choice, it is not a sustainable model.

For the future, we believe that the budget should include salaries for the team and funds to cover training for all organisers in topics such as anti-racism and accessibility.

5.10 MIT & Aalto – Our Feminist Futures & Feminist Futures Helsinki

This hackathon could not have been possible without our colleagues' support, encouragement, and mentorship at the Make The Breast Pump Not Suck! Collective at the MIT Media Lab. As we explained in chapter four: "Case: Feminist Futures Helsinki hackathon", we organised this hackathon because we could not attend Our Feminist Futures (OFF), the hackathon organised by the collective.

Right from the start, the MIT team was very supportive and encouraging of the idea of our team organising a parallel hackathon in Helsinki. It has been very inspiring to feel that we were a part of a bigger effort and movement to include equity at the centre of innovation. We first contacted the MIT team at the end of March, and since then, we have maintained communication with them and received mentoring and guidance on crucial aspects where we needed support.

Organising the FFH hackathon in parallel with OFF also let us put the challenges we experienced into perspective. Even though our lack of experience in organising hackathons made our work more difficult, looking at MIT's work, we also realised that many challenges we faced were related to the lack of resources, in terms of money, time, and team size, available to us. This made us believe that for the next time, securing more funding in advance and having more time to organise the hackathon could probably address many of the challenges we encountered.

Organising and running the hackathon in parallel with the MIT team was also beneficial for turning the FFH hackathon into research — this thesis. Based on the different hackathons they have run since 2014, several collective members have already published papers on feminist hackathons.

At the same time that we were writing this master's thesis, Alexis Hope, an organiser from OFF, was also writing her PhD dissertation titled "Social Change Through Community Innovation: Feminist and Participatory Design Approaches to Organising Inclusive, Equitable and Joyful Hackathons". This allowed us to collectively reflect on the possibilities of hackathons as research activities and their relationship to academia and universities. While talking to her about the interdisciplinarity of our research, she told us: "There is so much power in creating a model, even if we don't have all the answers figured out, because academia does have a tradition of building off of other people's ideas, it really is a very model-based thing — you know, we replicate same paper styles that we've seen, so here you are creating something new that people can then replicate" (Alexis Hope, interview, August 20, 2021).

We chose to follow the same model on intellectual property that the OFF followed: open source licensing. This means that all the outcomes and ideas delivered by the teams would be accessible after the hackathon. We decided this because we wanted to prioritise the participation of the organisations in the hackathon, as some would not have been able to participate if they had had to "buy" the outcome offered by the team. At the same time, we also acknowledge that this could have been problematic for the participants, as they were being asked to work for free and did not even own their idea after. This also resonated with an experience that the MIT team had in one of their hackathons. They shared how women of colour explained it was essential for them to know how they could have ownership and control over what they created, as it had been common that their ideas were taken and repackaged without giving them credit (Hope et al., 2019).

5.11 Preaching to the choir

While we are proud of all the people we were able to bring together in different forms throughout this process, we have also had to look at each other and ask ourselves: *Are we just preaching to the choir?*

When establishing partnerships and planning the public programme, we tried to do our best to bring together voices from different walks of life and with different intersectional identities. We were very aware that our positionality also affects what we enjoy, appreciate, understand and, ultimately, what we value. However, what we value does not define the value of the work itself.

During a panel discussion titled "Black feminism and culture in the Nordics: Who gets to be heard and seen and on what terms?" hosted by Astra and the Nordic Culture Point, the panellists discussed their struggles to obtain funding for their creative work. One panellist, Danish-Kenyan dancer, choreographer, and researcher Phyllis Akinyi, said:

> "Who gets the funding? That is a major thing in my world, because I see how in dance... what is considered art? And what is considered social impact? And what is considered some sort of exotic culture. I see that there is a hierarchy. And in that hierarchy also lies: Who gets to enter the state-funded schools? But what do they teach at those schools? Who is teaching? Which styles are we talking about? And in that: Who gets subsidised? (...) How do we not take it personally? Because if you keep getting rejections from funding, with the sentence: "due to the level of artistic quality"... But what is quality? And who gets to define that? How can you sit and define whether or not my work, or someone like me's work is of quality when you don't understand the basics to the foundation in which I move? (...) Who gets to decide who we see? Who gets to decide what is art? Who gets to decide which artists will be funded enough to continue? (...) If there are no gatekeepers that understand the structures in which we operate, how are we then going to change anything for the next generation?" (Nordic Culture Point, 2021).

"Who needs to see the projects that came out of the hackathon? And what kind of output would be necessary to prove our point? How does that align with or differentiate from how the projects were conducted and the kind of outputs we encouraged?"

This is where diversity within the organising team becomes essential, and it is also an area to improve within our own team. Due to the specific situation in which this initiative took form, the make-up of the team became more accidental than intentional. While we did have diverse nationalities, gender and sexual identities, ages, disciplines, and ethnicities in our team, we still acknowledge that we could have made more intentional efforts to have more community representatives. We also believe that this could have been better addressed if we had had more time and resources to compensate people.

In *Data Feminism*, the authors ask: "Who is it, exactly, that needs to be shown the harms of such differentials of power? And what kind of proof do they require to believe that oppression is real?" (D'Ignazio & Klein, 2020) When applying that mindset to our hackathon, we asked ourselves: Who needs to see the projects that came out of the hackathon? And what kind of output would be necessary to prove our point? How does that align with or differentiate from how the projects were conducted and the kind of outputs we encouraged (a very open call and a broad definition of what an output/outcome could be)? For the final Showcase, we invited representatives from various city councils around the country from many different organisations and educational institutions. However, despite this effort, only a handful of those people showed up.

5.12 Accessibility of Online Events

While many other events and conferences had to change their plans and move their production online due to the COVID-19 pandemic, we never considered hosting the hackathon in person. At most, we considered having a couple of in-person events during the hackathon, but we quickly agreed that it felt neither responsible nor necessary.

Figure 5.1: Tweet by Sasha Costanza-Chock[@schock] (2020, March 6).

The rapid development in online facilitation and accommodation, brought about by the pandemic, has sparked a strong reaction amongst the Disabled community and those with caring responsibilities who have been asking for these considerations to be made for years. Karrie Higgins, Disabled writer and intermedia artist, was one of the people that took to Twitter to express their frustration, writing:

"Are you seeing a pattern here? When disabled people NEED an accommodation, we are denied and gaslit. When abled people are affected, suddenly "impossible" things like a livestream are doable. Accessibility benefits everyone, but you only want it to benefit abled people!" (Higgins, 2020).

These discussions prompted us to reflect on the future of feminist co-creation events as well. At the time of writing, in September 2021, we are in the midst of an immense transition phase as more and more people are returning to in-person work and studies. This transition offers an opportunity to rethink how we come together and reflect on whom we prioritise as we model the world we want to reenter. As has been made clear by Disability activists for decades, the way society was structured pre-COVID did not work for many people. We should be asking questions like "How do we want to do this now? What are the meetings we've longed for? What are the things (...) that we should absolutely bring back?" (Brown, 2021). We have an opportunity to decide how we want to be together and what we want that to look like, but we need to have some honest conversations in order to do so.

When discussing what those conversations might look like in a work-setting where hybrid work-modes have become much more prevalent than ever, facilitator and author Priya Parker said: "I'm concerned about people assuming that we go back to in-person meetings, and you just kind of let people zoom in (...), but you're not actually restructuring your meeting in a way that allows for true hybrid participation, because otherwise we're punishing those who choose to work from home". Parker proceeded to ponder: "If there are certain people who are working from home and zooming in via hybrid work, do we have everybody in the office actually take the call through their computer in separate rooms to not basically exclude those who are choosing to work from home?" (Brown, 2021). This all relates to power and access.

If we organised more events with FFH in the future, when all restrictions are officially removed, this would mean having some very important conversations about priorities within our team. For example, in the application form for this year's hackathon, we asked about accessibility needs and were prepared to offer the support needed (included in our budget). But before even getting to that step, we need to ask: What is the priority of the space we are trying to create? When there are no external restrictions on how we can meet, which restrictions and opportunities do we wish to create for ourselves? Moreover, if equity or access is the number one priority and everybody has agreed to that, then there will be trade-offs, and maybe one of those trade-offs will be bodies in a room. However, if that is the case, that must also be reflected in the way resources are allocated (Brown, 2021). If we organise another online hackathon, what are other ways in which we can foster meaningful connections? What are other ways in which our participants can feel inspired and avoid Zoom-burnout? How do we build a culture where people can talk about what they feel and ask for what they need? (ibid.) *And what are the ways in which we can look to feminist values and participatory methods to guide the way?*

Chapter 6

Conclusion
Summary & Reflections

6. Conclusion: Summary and Reflections

The aims of this thesis were (1) to increase the understanding of the potentials of applying feminist values and principles in so-called "innovation spaces" like hackathons, (2) to complement the existing literature with a perspective from Finland, (3) to offer our take on its relation to sustainability, and (4) to explore how it all relates to our academic fields of design and urban planning.

To reach those aims, this thesis posed the following research questions:

(1) How might hackathons be designed with feminist values and principles at the core to facilitate creative forms of participation for socially engaged design practices?
(1.1) What are the benefits and challenges of applying feminist values and practices in hackathons?

(2) What are the benefits, and who are the beneficiaries, of bringing together multidisciplinary teams to work on projects proposed by community organisations?
(2.1) How might the emerging insights from this work serve as a bridge between intersectional feminism, real estate, urban planning, participatory design approaches, and the Finnish hackathon scene?

6.1 Feminist Framings in the Context of a Hackathon

Feminist framings to hackathons as innovation spaces for societal challenges urge us to consider what decisions can lead to better framings. These decisions can be shown in different ways: (1) who sets the agenda, (2) who participates, (3) who are the beneficiaries, (4) what is the process like, and (5) what is the role of accountability. In the following section, we will describe this further:

1. It matters who sets the agenda

Our findings are consistent with academic literature in that challenges set by community organisations significantly differ from those set by corporations in traditional hackathons. Rather than focusing on revenue and growth, they tend to focus on equity, well-being, and community needs. Centring the work and perspective of community organisations leads to agendas that bring valuable viewpoints on what needs innovation. Moreover, those agendas offer guidelines to navigate societal challenges from a social justice perspective.

In addition, it should be highlighted that the question of who sets the agenda starts from the organising team. Who is on that team? What lived experiences do they represent? What do they value? Before any partners are involved, the organising team sets the agenda and therefore must be diverse.

2. It matters who participates

Comparing the participant demographic in FFH with the demographics described in the literature on hackathons makes it clear that the framing and focus of a hackathon have a massive impact on who is attracted to the hackathon. Knowing this is important because, as we have explained earlier in this thesis, situatedness affects how people experience the world and, therefore, also what they consider important or worthy of attention.

Accommodating different lived experiences and acknowledging situated knowledge(s) are key to framing innovation from a feminist lens. However, instead of only bringing people from the margins to the centre, it is crucial to actively work to break down

the structures that uphold the centre/margin power imbalance in the first place. This process includes redistributing resources.

3. It matters who benefits

The question of beneficiaries can be considered both in the short and long term, though the two can never be entirely separated. Making a conscious decision that the benefits of the hackathon (financial, intellectual, social, and more) should go to the community and grassroots organisations, as well as people who are otherwise minoritised, is necessary. However, this sets restrictions and a framework within which elements such as budgets and partnerships must be designed (Costanza-Chock, 2020). It requires a system-level perspective to map the beneficiaries, and feminism offers valuable outlooks to do so.

4. Processes matter as much as outcomes

Hackathons have been criticised for prioritising short-term over long-term, thinking by encouraging participants to come up with fast solutions instead of studying and understanding the complexities of the issues (Costanza-Chock, 2020). However, we do not believe that hackathons must be ongoing events without a termination date to tackle systemic issues. Instead, we argue that how the participant journey is curated can significantly impact the type of outcome produced and how that outcome supports long-term thinking over quick fixes.

A feminist lens to building systemic perspectives can be found in the processes of consciousness-raising, in which participants are encouraged to move their thinking from the individual experience to the collective (Ortiz Escalante & Gutiérrez Valdivia, 2015). Therefore, curating a journey for hackathon participants that encourage reflexivity is vital for them to embed a system-level perspective in their work (Costanza-Chock, 2020). For example, in the FFH hackathon, we designed four toolkits that accompanied participants in each journey step.

Designing a process that does not require participants to develop a specific type of outcome (e.g. a tech-based solution, an app) can provide participants with the agency to imagine and expand the type of outcomes created in a hackathon.

We found that setting design principles rooted in intersectional feminist values to guide our decisions made the process much easier. It also made it easier for us to explain to others how we concretely implemented feminist values and practices. The design principles were largely inspired by our knowledge from *Data Feminism* (D'Ignazio & Klein, 2020) and *Design Justice* (Costanza-Chock, 2020) and our mentorship with Alexis from Our Feminist Futures.

5. Accountability matters

When framing anything as feminist, there is an inherent responsibility to stay true to the struggle from which feminism grows — a responsibility to be accountable. This thesis has explored some of the inherent tensions in this kind of work (D'Ignazio, 2019).

There are many ways of approaching matters of accountability in the context of a hackathon. Some of the ways we discovered through research and practice are: (1) define explicit principles that address issues of oppression and let them be at the core of the decision-making process, (2) be transparent about doubts, intentions, and shortcomings throughout, and (3) intentionally invite feedback and critique from everyone involved.

We worked on structuring the hackathon around feminist values through the 11 design principles described in 4.2.1.

6.2 Challenges of Applying Feminist Values and Principles to the Hackathon Format

Section 3.4.2 explored the critiques of hackathons, and section 3.4.3 exposed the tensions of time, trust, history, and expertise between HCI Research, Social Justice Aspirations, and Grassroots Politics (D'Ignazio, 2019). Although applying feminist values and principles to hackathons has benefits, some challenges relate to the traditional hackathon format.

For example, our experience with organising the FFH hackathon exposed how designing a setting that values different forms of knowledge and experiences requires considerable extra time to plan and imagine with partners and participants. Designing that setting also extends to questions of who participates and who is part of the conversation. Even when it is possible to remunerate participants for their time, it remains unclear how to create events with frameworks and cultures that welcome people with different experiences, expertise, needs, work or caring responsibilities, among others.

Encouraging consciousness-raising and systems thinking are also processes that require time in the journey of participants. However, the transient nature of hackathons makes that process of exploration and discovery challenging. The Our Feminist Futures hackathon tackled this challenge by organising an event that lasted one month, and we organised one that lasted 2.5 weeks. Another way this could be remedied would be if hackathons are positioned as sparks that can later be connected to further support (Alexis Hope, interview, August 20, 2021).

In theory, developing outcomes that confront tech solutionism sounds good, but it can become a challenge when hackathon funders and donors value and expect finished and scalable products. The mismatch in what is valued in a hackathon between the organisers and those who can give funding can risk disrupting the centring of feminist values.

Perhaps the most surprising challenge for us was the level of emotional labour we as organisers had to put into the work. Somehow, we were aware of the emotional labour that would be expected from the participants, but we underestimated the weight of the work on ourselves.

It should be emphasised that the hackathon that informed this thesis was a pilot and was organised in a concise time frame with a meagre budget. Therefore, the challenges we identified do not represent all feminist hackathons. We argue that rather than aim to find the one perfect way of doing socially engaged hackathons, we should perhaps instead think of hackathons as evolving and continuously responding to present needs.

6.3 The Potential of Gathering

As the potentials of change continue to be explored, it is essential to also reflect on the relationship to change. Emergent strategy, as explained by adrienne maree brown, is about how we can "intentionally get into the right relationship with the planet and with each other" (brown, 2020). Inspired by Octavia Butler, the idea is that "all that you touch, you change, and all that you touch also changes you back" (ibid.). As brown explains, people who strive to create change usually like the idea of the first part — that they have the power to change something. However, the idea that we ourselves are also changed is a more challenging concept to contend with. She suggests that we must learn to adapt with intention and poses the following questions: "*How can*

we understand that change is non-linear? How can we understand that change happens through relationships?" (ibid.).

Issues of social and political sustainability are complex matters and involve many parts. A systemic approach to sustainability requires that we rethink the relationships between the parts of a problem instead of fixing it as a whole (Stroh, 2015). We argue that spaces in which people connect and collaborate, like hackathons, are ideal locations to challenge and address such issues because these spaces can bridge disciplines and perspectives (ibid.) and enable us to rethink the relationship between them.

However, as discussed in subchapter 3.3, bringing people together is not enough, as presence does not automatically account for impactful participation. We have learned from feminist literature that the key to truly impactful relationships is co-liberation: building relationships that are mindful of power differentials from the past. I.e. academia is extractive to grassroots organisations and working towards dismantling them together, pursuing mutual benefits (Costanza-Chock, 2020; D'Ignazio & Klein, 2020).

According to our findings, who benefits depends heavily on (1) the complexity of the topic at hand, (2) the time and money available, and (3) the expertise of the team tackling the project. A project with higher complexity will likely also have a longer history (e.g. Sámi issues), which will require more time to understand the context. The complexity will often also be reflected in the level to which the community/communities are marginalised, which then requires more time to build trust and more money to compensate collaborators. Finally, the expertise in the team will affect who benefits (and to which degree). For example, if the team consists of HCI experts, but the community organisation needs political action or additional funding, the team might benefit more than the organisation since the team will gain knowledge and experience.

6.4 Showing Up As You Are, With What You Have

The fact that we had no expectations of the hackathon's outcomes allowed participants to bring their whole selves to the event because there were no technical or skill-based requirements — only an invitation to engage. As a result, the outcomes were very surprising and made us challenge our assumptions of what an outcome could be. We believe there is much value in not rushing to solutions and instead allowing the space to see what kind of conversations can form. For example, in the context of the FFH hackathon, conversations about patriarchal imaginings of family structures emerged due to the project focusing on surrogacy.

We argue that if one creates processes inside the hackathon that encourage people to participate with the knowledge and skills they already have, and if one makes sure that those processes support participants to be confident about what they already know, this can contribute to a shift in mindset. Rather than having a culture of exclusion, this mindset says: "You don't need to be an expert to be a part of the conversation". This attitude relates to agency and makes us wonder: *Can hackathons expand how we think about agency?* If hackathons can reassure people that they belong, just by existing in a body in this world, *can they also be a way to challenge power distribution in the decision- and knowledge-making processes that uphold the status quo?*

6.5 Hackathons Are the Spark – Social Justice Is the Flame

Some of the most significant benefits of organising the hackathon in the way we did, was (1) to see the appetite for social and political engagement and (2) to see the connections that were made along the way.

The conversations that a feminist hackathon can enable serve as a starting point for further development. By bringing attention to topics and issues that are otherwise ignored by the mainstream discourse, hackathons have the potential to shift the conversation. However, the benefits of hackathons lie in the opportunity to be the spark — not the flame. Nonetheless, hackathons can enable connections, relationships, and conversations to happen, creating long-term impact.

This argument prompts an interesting discussion around responsibility. For example, when what is addressed in a hackathon is not an issue of a single company or corporation, but rather dilemmas of society at large, e.g. Sámi issues, activists burnout or loneliness, the question is raised: *Whose responsibility is it actually to address those issues?*

6.6 Urgency and Dissent Amidst the Comfort of Convenience

We believe the question of responsibility also varies a lot depending on geographic location. In Finland, for example, there is a tendency to believe that addressing larger-scale systemic issues should be the government's responsibility. This belief is partly due to the high levels of trust in government and the general perception of Finland as a country of equal opportunity, progressive policies, and stability (Berglund, 2019). However, this sense of security counteracts the sense of urgency that is so critical to activism. By international comparison, Finland's activism is more aimed at dysfunctions and fragilities rather than survival. "This is not to say their calls for urgent change are disingenuous in any way, but rather to highlight the ease with which people here could – and do – avoid thinking about the extremity and riskiness of business-as-usual" (ibid., p. 236). Moreover, there is a perception in Finland of the government as a space for change that is not commonplace in many other places.

"In many places, it's like "the government would never do anything, so we need to self-organise". I think that part is really good to enable that approach of "Okay, if you want change, you need to take action" (FFH partner, interview, June 3, 2021).

This story of Finland as an equal country where everyone has the same opportunities creates a narrative against the very nature of urgency. However, there is urgency, as clearly shown in the breadth of topics addressed in this hackathon (see section 4.1.4). There just is not any urgency for the dominant groups, and they happen to be the people in power, the people with money, the people who set the agenda.

Hackathons, by contrast, do have that sense of urgency, so we wonder: How might we harness the urgency of hackathons for the good of civic action and social justice rather than for solutionist technological innovation? How can the Finnish public be challenged to take action even though they live in a country where there is a dominant narrative of safety and equality? *How can we urge people to dissent amidst the comfort of convenience?*

6.7 Bridging Feminism(s), Built Environment, Participation & Hackathons

As discussed in subchapter 3.1, feminism(s) have robust value frameworks and a strong ethos. However, the academisation of the theory has resulted in a depoliticised discourse that, in some instances, has removed feminism from its activist roots (Bilge, 2013; hooks, 2015). In addition, it is not always clear how to move from intention to action.

The built environment sector, particularly the real estate sector, can impact many other fields in society. At the same time, it plays a crucial role in (un)building physical surroundings and identities. Understanding the urban environment from the situatedness of different experiences can enable practitioners to design better societies. However, the sector lacks frameworks for equitable collaboration processes.

On the other hand, participatory design has a solid methodological framework, offering many ways to engage and conduct action research. This discipline has, however, also been increasingly depoliticised (Bannon et al., 2019).

Hackathons have an exciting format, but they also have, in some cases, lost the focus on values. In other cases, like Solve the SDGs, the good intentions are there, but in the case of that hackathon, it is still perpetuating the solutionism criticised by many scholars and practitioners (see Costanza-Chock, 2020; D'Ignazio & Klein, 2020; DeTar, 2013; Hope et al., 2019; Lin, 2016).

We want to emphasise that this is not to say that solutions are wrong. Solutions are clearly needed. What we argue against is putting a bandaid on an open wound and calling it a solution when the problem is not the wound itself. In this analogy, the problem is the minefield created by previous generations, which caused the wound. The wound is a result of the issue, but it is not the issue. Likewise, the problem is not that people do not want to participate in urban planning projects. Instead, the problem is the lack of consideration of how that participation happens, with whom, and why. Until those questions are addressed, the issues will remain, and the power structures will stay intact.

We argue that there is a productive tension between these four disciplines: feminism (focus on equity and power and thinking beyond binaries), built environment (creation of physical environments and identities), design (curiosity about possible futures and a productive tendency), and hackathons (urgency and encouragement to rethink), and this productive tension may be harvested through feminist hackathons. Moreover, this tension also offers potential for novel relationships and networks.

6.8 What Comes After the Spark? Rethinking Relationships With Institutions

In the field of systems thinking, it is understood that to optimise the whole, we must improve the relationships among the parts (Stroh, 2015). The findings of this study suggest that the university can serve as a bridge between community and academia to serve the geographic community better it is located in and enrich academic practices. However, this will require a dedication to break down the barriers to academia — e.g. through language and resource distribution.

This thesis has provided a deeper insight into the societal value created when community and grassroots organisations set the agenda of a hackathon. However, we argue that it is not only valuable for the teams or those directly involved but also for

the broader public and governments. There is a potential for hackathons to be a stage that brings attention to the work of grassroots organisations, but we still need better structures to support this bridge. At the other end of the hackathon, we need better structures that catch the projects and continue supporting them. As such, hackathons can function both as initiators of innovation and impact extenders (Goodman et al., 2017). In addition, our findings suggest that hackathons have the potential to become places that aim to ask questions rather than provide answers.

6.9 The Potentials of Feminist Hackathons

By offering new models for feminist hackathons, we speculate that the hackathon genre might be restructured to facilitate creative forms of participation for socially engaged design practices (Porter et al., 2017). This thesis has identified the following potentials of feminist hackathons:

- Feminist hackathons can potentially **shift public discourse** by bringing attention to topics and issues that are otherwise ignored.
- Organisers of a feminist hackathon might better **support participants** by reassuring them of the value of the knowledge they already hold and designing frameworks that enable agency.
- Organisers might better **support partners** by providing a clear framework for the collaboration, stating expectations clearly from the beginning.
- To support the principle of **collaboration over competition**, organisers can facilitate joint sessions where participants share their insights and struggles. This will also foster collective decision making abilities.
- Feminist hackathons have the potential to encourage **educational institutions** like universities to **rethink partnerships with community organisations**. This can be done by establishing non-oppressive coalitions that can leverage institutional privilege without reinscribing it (D'Ignazio, 2019).
- Feminist futures imagined in a hackathon may function as a **tool for backcasting**.
- Project ideas that are based on local contexts have the potential to **connect participants to their surroundings**.
- Hackathon processes that encourage reflexivity and positionality will offer participants an **intellectually stronger standpoint to address the presented issues**.
- By focusing on low-tech and no-tech solutions, feminist hackathons can **challenge tech-solutionism**.
- By centring intersectional feminist values such as **accessibility and pursuit of justice**, organisers of feminist hackathons will enable more diverse participation.
- By attracting different partners and participants, it is likely to **diversify the narrative** on certain issues.
- Feminist hackathons have the potential to **mobilise different interest groups** in society for social justice.
- Feminist hackathons have the possibility to **challenge narrow understandings of value** as something purely commercial by making accounting for a diversity of positionalities and experiences. As a consequence, this can lead to **strengthening private-public-people partnerships**.
- Finally, as hackathons are a platform where different issues can be discussed, the above-mentioned benefits can **extend to diverse fields and industries** who participate and engage with feminist hackathons — such as the fields of real estate or design.

Chapter 7

References

7.1 Self-Audit
7.2 Reference List
7.3 Figures & Illustrations

7. References

7.1 Self-Audit

Inspired by the ambitious goal setting and transparent communication of the sources used and projects referenced in the book Data Feminism (D'Ignazio & Klein, 2020), we decided to audit our reference list. We also included interviewees and public speakers because they have been a great source of knowledge and inspiration to us. Many of the insights that made this thesis possible came from our conversations with them and what they shared in their talks. We did this to live up to our values around transparency and positionality. We believe it essential to clarify whose knowledge we have been building on and consider this a way to hold ourselves accountable.

We have analysed every author and speaker from our reference list. In addition, also all our interviewees and speakers from the public programme. For papers with multiple authors, all co-authors are part of this audit.

This self-audit amounted to 248 data points, or 216 people and 32 organisations and websites marked as "organisations".

Naturally, there are many notes and buts to be made about something like this. Moreover, we want to be the first to say that this self-audit is not perfect. Nevertheless, it is a starting point. We want to stress that the purpose of this is not to reinforce binaries, though it may come across that way. Rather, we want to embrace a reflexive practice and an awareness of the people whose words and works we choose to amplify through our work.

We have mapped these 248 people and organisations, whose knowledge we have been building on in this thesis, according to their home country, their gender, and their ethnicity/race (specifically whether they were white or BIPOC — meaning Black, Indigenous, People of Colour). We have chosen these categories because academia has been criticised for being predominantly white and male. In the literature review, especially in chapter three, we also learned how knowledge-making has been mainly influenced and perpetuated by groups in positions of power (Bilge, 2013; Lewis, 2013; Valentine, 2007) and that knowledge creation is inherently situational and reflective of the creators' interest (Collins, 1989; D'Ignazio et al., 2020; Haraway 1988). By reflecting on the demographics of our sources, we can identify the patterns in the knowledge we have built on. In our case, most of the sources that we used have been written by female-presenting, white authors located in the United States and Finland.

Now, we should mention that we see the irony in putting labels on people when we do not necessarily think that is the right way of viewing the world. Creating the binary between white and BIPOC people alone can be seen as problematic. Nonetheless, we have found it valuable in this case. Of course, these identities are more accessible to know about public figures, which not all of our authors are. Therefore there are some missing data points.

Nationality

Our thesis builds on the knowledge of people and organisations from (at least) 30 countries. The two most prominent were the United States and Finland. In fact, 37.2 per cent of the people and organisations were from the United States and 25.9 per cent from Finland (of which 1.2 per cent were identified to be specifically from Sápmi). Furthermore, 12 data points correspond to people we could not identify the home country/nationality of and to companies based in more than one country. For organisations based in only one country, their country is also marked. Organisations

based in several countries are marked as unknown. In the case of, for instance, online dictionaries, these are not marked.

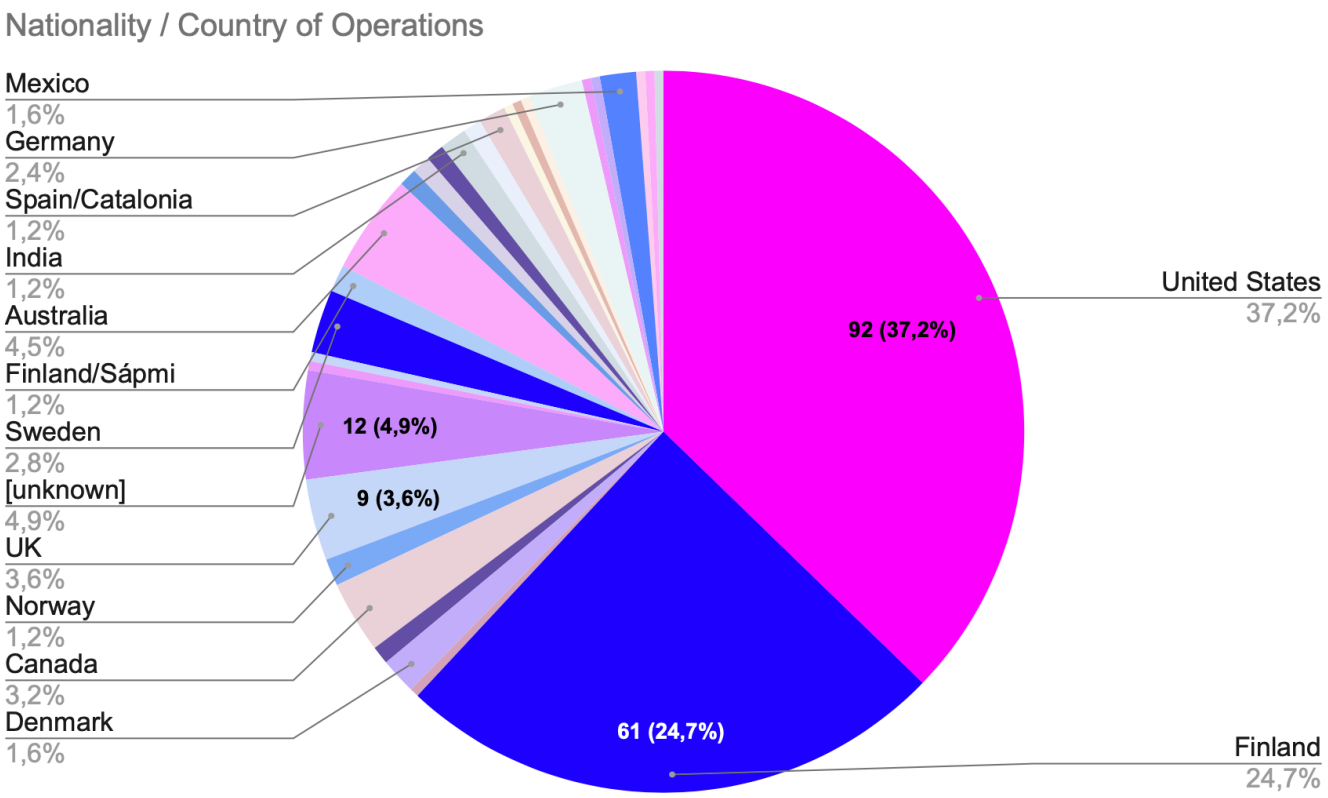


Figure 7.1: Nationality/ Country of Operations of the sources we have used for the thesis.

Gender

We have often assumed people's gender based on how they present in photos unless something else has been publicly stated. Therefore we use the terminology female-presenting and male presenting rather than female and male. In addition to these, we have a category for Trans/Non-binary/Genderqueer folks. This is to acknowledge the unique circumstances and perspectives that these people bring.

Out of the 248 data points
58,1 per cent were Female presenting (n=144)
24.6 per cent were Male presenting (n=60)
4.2 per cent were Trans/Non-Binary/Gender queer (n=11)
12.9 per cent were Non-Assigned and Organisations (n=33)

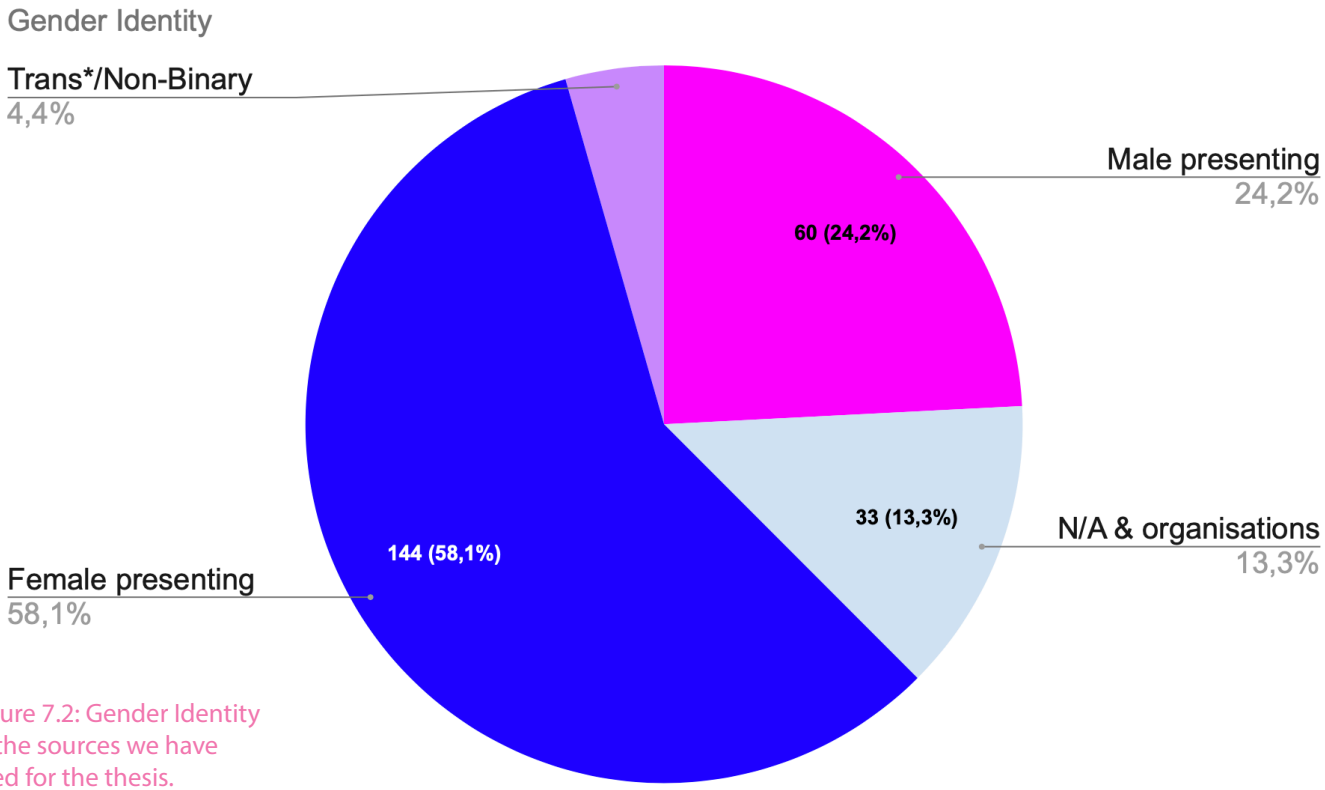


Figure 7.2: Gender Identity of the sources we have used for the thesis.

Ethnicity/Race

We also included this note in the glossary at the beginning of the thesis. However, as a reminder, we acknowledge that there are different perceptions of these two words across Europe and the United States (where a lot of our literature comes from). Both may be triggering to different people. The different perceptions are due to the historical influence of the words on each continent.

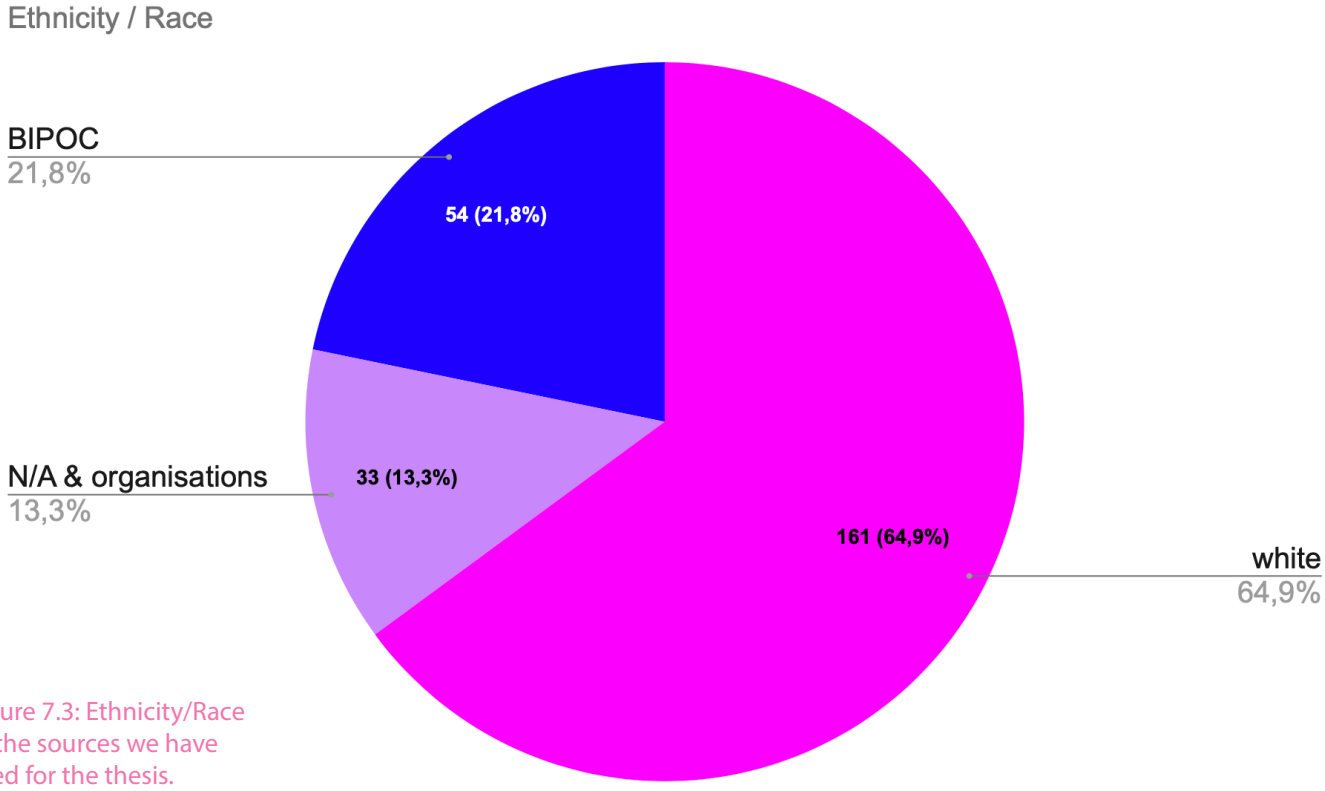


Figure 7.3: Ethnicity/Race of the sources we have used for the thesis.

Out of the 248 data points
64.9 per cent were white (n=162)
21.8 per cent were BIPOC (n=54)
13.3 per cent were not assigned (N/A & Organisations) (n=33)

Limitations
All individuals and organisations are weighted equally in this self-audit, meaning, for instance, that someone we have only referenced once, for the definition of a term, is weighted equally to someone we have referenced many times and whose work has been fundamental to our thesis. A more elaborate system would need to be developed to reflect this difference in influence better.

In Data Feminism, D'Ignazio and Klein (2020) set specific aspirational metrics for their research before writing their book. The goals were specific to authors and topics. For example, to live up to countering classism, they set the target that 50 per cent of feminist projects discussed would come from outside the academy. To counter cissexism, they set the goal to centre trans perspectives in the book sections that discussed the gender binary. We found it particularly interesting that, after setting these aspirational metrics, they compared them with the final percentages in their work. As they reflected on their audit, although some were met, the review process of academia made that they significantly increased their citations of white authors and projects of the Global North.

"Many people who participated in our peer review process (both online and anonymously) noted that we should back up our assertions with citations. [...] When looking at the history of engagement with a particular idea, or when asking ourselves which notable person in a particular field we should name, we thought less about our values for the book and more about what we already knew about those areas. In so doing, we inadvertently reproduced the biases of academia—ironically, through a mechanism very similar to the privilege hazard we name in the book" (D'Ignazio & Klein, p. 221).

Reflections
We do not believe there can be any generic goals for representation since it will depend on the topic, geographic focus, and more. For example, in our case, our focus was Finland, but we looked to the United States as that is where the most prominent examples of feminist hackathons have been done and where research about them has been published. This naturally resulted in the majority of the sources coming from those two countries. Instead, we argue for the importance of being aware of the knowledge one might otherwise take for granted or consider objective. If one sets out to write about feminism, for example, but only reads the work of white authors, what is presented is likely only to reflect the perspectives of white feminists.

The main benefit we find from self-auditing our resources is not necessarily the outcomes and numbers that we get in the end — but rather the ability to approach knowledge more critically every time we interact with different sources. For us, being mindful of whose work we are (not) building on was an excellent start to challenge and counter normative narratives. This is the learning we would like to share with our readers.

In addition to being a way to hold ourselves accountable, it is also an invitation to you, the reader, to hold yourself accountable in your work going forward. Whose knowledge do you build on? Whose knowledge do you trust? Whose knowledge do you consider valid, legit, important, and indisputable? And what will be your next step?

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7.3 Figures & Illustrations

Figure 3.1: The Foundations of the Literature Review. Map showing the interconnections between the key concepts we are exploring through existing literature. The format of this map was inspired by a similar map by Australian designer and researcher Kimberley Crofts.

Figure 3.2: 'What do we mean by feminism?, by Helmi Korhonen for Feminist Futures Helsinki (2021).

Figure 3.3: Matrix of Domination. Graphic by Joana Varon and Clara Juliano adapted for Deep Dives (Varon, 2020).

Figure 3.4: 'The four domains of the matrix of domination', by D'Ignazio and Klein (2020). D'Ignazio and Klein created this chart for Data Feminism based on concepts introduced by Patricia Hill Collins in Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment.

Figure 3.5: 'Silenced Voices of Everyday Sheroes', by Samanta Tello (2016).

Figure 3.6: 'Data Feminism', by Deep Dives (2020). Status update image [Facebook update]. Retrieved from https://m.facebook.com/permalink.php?id=667009223398768&story_fbid=2758383397594663.

Figure 3.7: 'From data ethics to data justice', by D'Ignazio and Klein (2020, p. 60).

Figure 3.8: 'Circle of Privilege: Finnish job market edition', by Paola Elefante (2021).

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Figure 3.11: Visualisation of how much space cars take in the city of Tallinn, Estonia. "In nearly all districts in Tallinn, the land surface dedicated to cars doubles the total amount of residential space (all buildings' floors included)". Graphic and description by SPIN UNIT (2019). metaPARK – Performance-based parking in Tallinn. Retrieved from https://www.spinunit.eu/2019/05/05/metapark/.

Figure 3.12: Avelino, F. [@FlorAvelino] (2021, September 11). Great thread on the nature of
the housing crisis in the Netherlands. [Tweet]. Twitter. https://twitter.com/FlorAvelino/
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Figure 3.13 Illustrated map of existing and emerging design disciplines, by Moegerlein (2019).

Figure 3.14: The Oracle for Transfeminist Futures. From a game by the same name, developed at Coding Rights in partnership with media makers and scholars Sasha Costanza-Chock and Clara Juliano. The game is a playful tool designed to help the players collectively envision, prototype, and share ideas for alternative imaginaries of futuristic technologies. The game explores agency, autonomy, empathy, embodiment, intuition, pleasure, and decolonisation (Varon, 2020).

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Figure 3.16: 'Tensions in a Feminist Hackathon', inspired by the work of D'Ignazio in Four Tensions Between HCI Research, Social Justice Aspirations, and Grassroots Politics (2019).

Figure 3.17: Screenshots from the Junction hackathon website (22 August 2021). Retrieved from https://www.hackjunction.com.

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Figure 4.1: Landing page of the Feminist Futures Helsinki website (22 August 2021).

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Figure 4.4: Feminist Futures Helsinki hackathon 2021 timeline. Phase 1: 'Before' (2021).

Figure 4.5: Screenshot from the FFH team's first brainstorming session. The image shows the team's answers to the questions: "what do we want to do?", "why do we want to do it?", "who do we want to reach?", "what are the values that we're trying to amplify?" and "what is missing from the Finnish/European hackathon scenes?".

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Figure 4.17: Screenshot from the talk 'Making Space / Taking Space'. In the image, Brenda Vértiz Márquez presents the "Peatoniños", a project combining activism and urban design to accommodate public spaces for children. The full talk can be found at www.feministfutureshelsinki.org.

Figure 4.18: Screenshot from the talk 'Bridging Two Worlds: Exploring Bilingual Typefaces'. In the image, Samar Zureik compares different typefaces. The full talk can be found at www.feministfutureshelsinki.org.

Figure 4.19: Screenshot from the talk 'Indigenous Perspectives on Eco-Justice'. In the image, Petra Laiti centers Sápmi in a map of Northern Europe. The full talk can be found at www.feministfutureshelsinki.org.

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Figure 5.1: Costanza-Chock, S. [@schock] (2020, March 6). Abled people: NO WE CANNOT DO REMOTE CONFERENCES ITS SOOOO HaRd. [Tweet]. Twitter. https://twitter.com/schock/status/1235946819038953473.

Figure 7.1: Nationality/Country of Operations of the sources we have used for the thesis.

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Illustration by Mia Minerva
Commissioned for the Feminist Futures Helsinki hackathon 2021